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CURRENT INDUSTRIAL REPORTS

Steel Mill Products

1984

U.S. Department of Commerce
BUREAU OF THE CENSUS

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SUMMARY OF FINDINGS

Net shipments of steel mill producers during 1984 totaled 74.5 million short tons, 10 percent above the 69.2 million tons shipped during 1983.

A description of the survey methodology and related information appear on page 23.

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Table 1. VALUE OF SHIPMENTS, INCLUDING INTERPLANT TRANSFERS, OF STEEL MILL PRODUCTS, BY CLASS OF PRODUCTS: 1980 TO 1984

(Value in thousands of dollars)

Product code	Product description	Year	Value of shipments and interplant transfers		
			Total	Shipments to other companies	Transfers to other plants of the same company
3312 pt.	Total	1984	45,921,439	39,753,972	6,167,467
		1983	40,804,251	34,936,417	5,867,834
		1982	40,188,883	35,132,536	5,056,347
		1981	59,859,307	51,805,099	8,054,208
		1980	51,550,837	44,730,487	6,820,350
33122	Steel ingot and semifinished shapes	1984	3,885,608	1,862,923	2,022,685
		1983	3,181,646	1,502,010	1,679,636
		1982	2,962,827	1,505,662	1,457,165
		1981	5,321,665	2,448,718	2,872,937
		1980	5,104,882	2,556,516	2,548,366
33123	Hot-rolled sheet and strip, including tin mill products[1]	1984	14,555,937	12,578,399	1,977,538
		1983	13,770,517	11,539,972	2,230,545
		1982	11,935,388	10,037,045	1,898,343
		1981	15,671,599	13,246,614	2,424,985
		1980	13,636,897	11,770,989	1,865,908
33124	Hot-rolled bars and bar shapes, plates, structural shapes, and piling	1984	8,712,737	8,171,102	541,635
		1983	7,585,629	7,068,641	516,988
		1982	8,262,242	7,632,947	629,295
		1981	13,261,064	12,103,491	1,157,573
		1980	12,391,612	11,326,648	1,064,964

See footnotes at end of table.

Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Nathaniel A. Shelton, (301) 763-5547.

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Table 1. VALUE OF SHIPMENTS, INCLUDING INTERPLANT TRANSFERS, OF STEEL MILL PRODUCTS, BY CLASS OF PRODUCTS: 1980 TO 1984--Continued

(Value in thousands of dollars)

Product code	Product description	Year	Value of shipments and interplant transfers		
			Total	Shipments to other companies	Transfers to other plants of the same company
33125 33155	Steel wire	1984	1,614,795	1,475,618	139,177
		1983	1,469,044	1,327,910	141,134
		1982	1,347,307	1,245,836	101,471
		1981	1,587,153	1,466,532	120,621
		1980	1,509,934	1,396,898	113,036
33126 33176	Steel pipe and tube	1984	5,564,188	5,049,186	515,002
		1983	4,495,270	4,063,707	431,563
		1982	7,099,263	6,751,956	347,307
		1981	12,574,137	11,984,031	590,106
		1980	8,818,215	8,381,005	437,210
33127 33167	Cold-rolled steel sheet and strip[1]	1984	9,398,673	8,462,407	936,266
		1983	8,664,867	7,828,406	836,461
		1982	6,956,830	6,367,341	589,489
		1981	8,904,480	8,016,494	887,986
		1980	7,614,339	6,903,323	706,016
33128 33168	Cold-finished steel bars and bar shapes	1984	1,633,555	[2]1,633,555	(2)
		1983	1,253,091	[2]1,253,091	(2)
		1982	1,215,457	[2]1,215,457	(2)
		1981	1,769,803	[2]1,769,803	(2)
		1980	1,608,951	[2]1,608,951	(2)
33129	Other steel mill products, except wire products	1984	555,946	[3]555,946	(3)
		1983	384,187	[3]384,187	(3)
		1982	409,569	[3]409,569	(3)
		1981	769,416	[3]769,416	(3)
		1980	866,007	[3]866,007	(3)

[1] Hot-rolled, metallic coated, and electrical cold-rolled sheet and strip are included in product class 33123, hot-rolled sheet and strip.

[2] Transfers to other plants of the same company of between $20 and $50 million are included with shipments to other companies to avoid disclosing figures of individual companies.

[3] Transfers to other plants of the same company of between $2 and $5 million for 1984 and $5 and $10 million for 1983 are included with shipments to other companies to avoid disclosing figures of individual companies.

Table 2. PRODUCTION OF RAW STEEL: 1984 AND 1983

(Thousands of short tons)

Product description	1984	1983	Product description	1984	1983
Total	98,898	85,293			
By grade of steel:			By type of furnace:		
Carbon	85,926	73,381	Open hearth	5,840	5,950
Alloy	11,558	10,153	Electric	30,641	27,040
Stainless	1,414	1,759	Basic oxygen	62,918	52,194

Table 3. NET SHIPMENTS OF STEEL MILL PRODUCTS: 1984 AND 1983

(In short tons)

Product description[1]	Net shipments[2]	
	1984	1983
All grades	74,462,164	70,162,251
Carbon steel	65,874,394	62,790,635
Ingots and semifinished shapes and forms (blooms, billets, slabs, sheet bars, tinplate bars, tube rounds, skelp, and wire rods)	1,925,031	1,784,396
Finished shapes:		
Plates	3,162,417	2,708,436
Sheets:		
Hot-rolled (including enameling sheets)	10,765,544	10,987,151
Cold-rolled	12,928,747	12,730,328
Sheets and strip:		
Galvanized:		
Hot-dipped	5,264,398	4,979,058
Electrolytic	657,048	639,299
All other metallic coated (including long ternes and electrical)	1,314,653	1,179,630
Strip:		
Hot-rolled	-284,781	-40,479
Cold-rolled	925,138	877,010
Tin-mill products:		
Black plate	343,932	385,383
Electrolytic and hot-dipped tin plate	2,810,085	2,951,802
All other tin mill products (including tin free steel, short ternes, and foil)	958,559	972,479
Structural shapes (heavy), sheet piling and bearing piles	2,804,526	2,725,404
Bars:		
Hot-rolled bars except concrete reinforcing	5,072,002	4,423,800
Light structurals (under 3")	1,054,354	1,007,139
Concrete reinforcing bars	4,352,722	4,335,067
Cold-finished bars	1,265,891	1,047,752
Tool steel	1,896	995
Rails, wheels, and track accessories:		
Rails:		
Standard tee (over 60 lbs. per yard)	894,485	607,372
All other rails, including light (60 lbs. per yard and under)	30,030	26,260
Joint bars	26,664	16,649
Tie plates	162,455	115,853
Wheels (rolled and forged)	59,907	52,420
Axles (rolled and forged)[3]	12,155	6,148
Track spikes	47,197	55,673
Pipe and tubes:		
Line pipe	836,012	715,462
Oil country goods	1,148,935	640,176
Pressure tubing:		
Seamless	62,389	55,755
Welded	113,005	101,417
Mechanical tubing:		
Seamless	119,428	75,435
Welded	1,880,618	1,626,894
Structurals	672,990	541,119
Miscellaneous (including standard pipe)	931,768	1,037,089
Wire:		
Plain wire	1,931,556	1,853,364
Galvanized wire	273,663	267,845
Other coated wire	140,514	135,920
Carbon steel--Continued		
Finished shapes--Continued		
Wire products[4]:		
Nails and staples	342,214	340,098
Barbed and twisted wire	61,879	73,319
Wire fence, woven and welded	210,787	230,457
Bale ties	37,728	39,003
Wire rope and cable	191,997	159,233
Wire strand:		
For prestressed concrete	155,657	137,972
Other	129,120	112,404
Woven wire netting	79,079	72,648
Alloy steel, except stainless	7,073,028	6,094,128
Ingots and semifinished shapes and forms (blooms, billet, slabs, sheet bars, tube rounds, skelp, and wire rods)	725,790	753,297
Finished shapes:		
Plates and structural shapes (3" and over)	1,593,175	1,381,059
Sheet and strip:		
Sheets:		
Hot-rolled	1,203,486	1,065,585
Cold-rolled	336,438	347,437
Sheets and strip:		
Galvanized, electrical, and metallic coated	376,841	374,586
Strip:		
Hot-rolled	62,603	53,240
Cold-rolled	160,015	139,789
Bars:		
Hot-rolled (including structural shapes under 3")	1,494,291	1,256,028
Cold-finished	225,048	153,664
Tool steel:		
High speed	15,037	8,915
Other than high speed	48,195	29,957
Pipes and tubes:		
Oil country goods and line pipe	395,644	179,527
Pressure tubing	20,891	24,703
Mechanical tubing	356,501	279,978
Miscellaneous (including standard and structural)	19,501	14,455
Wire (plain and coated)	39,572	31,908
Stainless steel	1,514,742	1,277,488
Ingots, and semifinished shapes and forms (blooms, billets, slabs, sheet bars, tube rounds, skelp, and wire rods)	77,196	92,575
Finished shapes:		
Plates and structurals	126,952	114,633
Sheets and strip:		
Hot-rolled	91,899	85,211
Cold-rolled	915,281	737,271
Bars:		
Hot-rolled	36,678	31,535
Cold-rolled	97,184	68,201
Pipes and tubes:		
Pressure tubing:		
Seamless	9,829	10,797
Welded	44,158	41,636
Mechanical tubing:		
Seamless	2,096	2,517
Welded	31,484	26,181
Wire	81,985	66,931

[1] Product codes are listed in tables 4 and 5.

[2] See text for derivation of net shipments.

[3] Excludes axles made in establishments classified in industry 3462, iron and steel forgings.

[4] Represents wire products produced within steel works and wire drawing establishments. Such establishments accounted for approximately the following percentages of the total value of shipments of these products in 1982 based on final data from the 1982 Census of Manufactures: nails and staples, 45 percent; barbed and twisted wire, 93 percent; wire fence, woven and welded, 74 percent; bale ties, 45 percent; wire rope and cable, 67 percent; wire strand for prestressed concrete, 90 percent; wire strand, other, 70 percent; and woven wire netting, not available.

Table 4A. RECEIPTS, CONSUMPTION, AND SHIPMENTS OF STEEL MILL PRODUCTS: 1984

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Receipts[2 3] (quantity)	Steel consumed in producing plants (quantity)	Shipments[2] Total Quantity	Total Value f.o.b. plant	To other companies Quantity	To other companies Value f.o.b. plant	Transfers to other plants of same company Quantity	Transfers to other plants of same company Value f.o.b. plant
	CARBON STEEL								
33122 11	Ingots	458,380	89,323	368,535	85,562	103,074	26,232	265,461	59,330
	Semifinished products:								
33122 13	Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp	3,743,329	762,672	3,903,192	1,093,342	939,091	287,218	2,964,101	806,124
33122 19	Wire rods	2,263,902	78,623	3,188,297	1,047,138	2,987,912	973,882	200,385	73,256
	Finished products:								
33124 12	Plates	15,526	102,053	3,075,890	1,241,836	3,037,714	1,226,457	38,176	15,379
	Sheets:								
33123 11	Hot-rolled (including enameling sheets)	8,569,362	227,564	19,107,342	6,229,580	14,140,829	4,763,269	4,966,513	1,466,311
33167 11	Cold-rolled	1,022,855	448,668	13,502,934	6,121,305	12,193,016	5,553,286	1,309,918	568,019
	Sheets and strip:								
	Galvanized:	117,652	11,540	5,370,510	3,008,341	5,194,275	2,894,535	176,235	113,806
33123 13	Hot dipped	3,078	(D)	659,886	428,779	(D)	(D)	(D)	(D)
33123 15	Electrolytic								
33123 16	All other metallic coated (including long ternes and electrical)	22,692	14,862	1,322,483	786,414	(D)	(D)	(D)	(D)
	Strip:								
33123 19	Hot rolled	764,697	91,778	588,138	277,402	544,176	258,676	43,962	18,726
33167 15	Cold rolled	234,321	5,910	1,153,549	921,154	918,680	790,309	234,869	130,845
	Tin-mill products:								
		17,822	(D)	361,730	189,942	284,531	149,467	77,199	40,475
33123 24	Black plate	(D)	(D)	2,815,079	1,750,739	2,811,679	1,748,713	3,400	2,026
33123 26	Electrolytic and hot-dipped tin plate								
33123 27	All other tin mill products (including tin free steel, short ternes, and foil)	-	-	958,559	556,822	(D)	(D)	(D)	(D)
33124 15	Structural shapes (heavy), sheet piling and bearing piles	(D)	7,411	2,808,283	1,013,990	2,779,968	1,004,125	28,315	9,865
	Bars:								
		1,188,550	73,538	6,187,014	2,481,736	5,659,059	2,288,923	527,955	192,813
33124 22	Hot rolled bars except concrete reinforcing	(D)	(D)	943,307	280,280	756,359	225,770	186,948	54,510
33124 24	Light structurals (under 3")	8,891	392,415	3,969,198	1,077,945	3,557,750	965,678	411,448	112,267
33124 26	Concrete reinforcing bars	43,442	174	1,309,159	974,831	1,305,531	972,278	3,628	2,553
33168 11	Cold finished bars								
33124 29	Tool steel	89	42	1,943	8,359	1,938	8,330	5	29
	Rails, wheels, and track accessories:								
	Rails:	(D)	(D)	893,429	363,938	890,632	362,584	2,797	1,354
3312C 11	Standard tee (over 60 lb. per yard)								
3312C 13	All other rails, including light (60 lb. per yard and under)	(D)	(D)	29,677	15,621	(D)	(D)	(D)	(D)
3312C 15	Joint bars	(D)	(D)	25,571	25,050	(D)	(D)	(D)	(D)
3312C 17	Tie plates	(D)	(D)	162,497	65,490	(D)	(D)	(D)	(D)
3312C 19	Wheels (rolled and forged)	(D)	(D)	59,903	50,660	(D)	(D)	(D)	(D)
3312C 21	Axles (rolled and forged)[4]	-	-	12,153	8,366	(D)	(D)	(D)	(D)
3312C 23	Track spikes			47,197	26,821	(D)	(D)		
	Pipe and tubes:								
		(D)	(D)	877,728	449,069	874,454	446,501	3,274	2,568
33176 12	Line pipe	(D)	(D)	1,357,825	962,232	(D)	(D)	(D)	(D)
33176 19	Oil country goods								
	Pressure tubing:	(D)	(D)	66,011	77,126	(D)	(D)	(D)	(D)
33176 21	Seamless	(D)	(D)	107,005	137,783	(D)	(D)	(D)	(D)
33176 22	Welded								
	Mechanical tubing:	(D)	(D)	124,164	147,031	(D)	(D)	(D)	(D)
33176 23	Seamless	67,945	80,277	1,868,286	1,427,304	1,786,800	1,363,794	81,486	63,510
33176 24	Welded	(D)	(D)	664,841	300,545	(D)	(D)	(D)	(D)
33176 27	Structurals	18,949	(D)	933,191	587,899	912,841	573,830	20,350	14,069
33176 29	Miscellaneous (including standard pipe)								
	Wire:	263,973	639,943	1,555,586	901,140	1,379,642	809,192	175,944	91,948
33155 11	Plain wire	60,502	67,835	266,330	175,975	237,317	154,561	29,013	21,414
33155 15	Galvanized wire	11,022	1,199	150,337	171,108	127,442	153,598	22,895	17,510
33155 19	Other coated wire								
	Wire products:[5]	(D)	(D)	344,268	292,928	(D)	(D)	(D)	(D)
33152 21	Nails and staples	(D)	(D)	62,099	45,915	62,099	45,915	-	-
33159 51	Barbed and twisted wire	(D)	-	222,855	155,476	(D)	(D)	(D)	(D)
33156 21	Wire fence, woven and welded	(D)	-	37,760	25,428	(D)	(D)	(D)	(D)
33159 55	Bale ties	(D)	(D)	192,386	331,636	(D)	(D)	(D)	(D)
33151 11	Wire rope and cable								
	Wire strand:	-	-	155,657	90,710	155,657	90,710	-	-
33151 33	For prestressed concrete	(D)	(D)	130,505	97,826	(D)	(D)	(D)	(D)
33151 35	Other	-	-	79,079	72,401	(D)	(D)	(D)	(D)
33157 71	Woven wire netting								

See footnotes at end of table.

Table 4A. RECEIPTS, CONSUMPTION, AND SHIPMENTS OF STEEL MILL PRODUCTS: 1984--Continued

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Receipts[2] [3] (quantity)	Steel consumed in producing plants (quantity)	Shipments[2] Total Quantity	Total Value f.o.b. plant	To other companies Quantity	To other companies Value f.o.b. plant	Transfers to other plants of same company Quantity	Transfers to other plants of same company Value f.o.b. plant
	ALLOY STEEL								
33122 31	Ingots	218,151	218,588	266,553	200,785	50,637	34,696	215,916	166,089
	Semifinished products:								
33122 36	Blooms, billets, slabs, sheet bars, rounds, and skelp	458,105	252,230	654,802	472,827	366,127	283,520	288,675	189,307
33122 39	Wire rods	13,068	(D)	21,424	18,475	(D)	(D)	(D)	(D)
	Finished products:								
33124 31 33124 34 33124 35	Plates and structural shapes (3 inches and over)	50,347	23,773	1,619,479	893,471	1,500,096	838,469	119,383	55,002
	Sheets and strip:								
	Sheets:	71,402	(D)	1,256,141	552,845	1,023,066	485,315	233,075	67,530
33123 31	Hot rolled	(D)	(D)	342,650	288,606	(D)	(D)	(D)	(D)
33167 31	Cold rolled								
33123 34	Galvanized, electrical, and metallic coated	(D)	(D)	364,914	378,069	(D)	(D)	(D)	(D)
	Strip:	24,929	(D)	87,532	50,972	(D)	(D)	(D)	(D)
33123 39	Hot rolled	22,528	(D)	182,543	260,683	(D)	(D)	(D)	(D)
33167 35	Cold rolled								
	Bars:	151,761	(D)	1,610,322	1,006,497	1,510,462	947,014	99,860	59,483
33124 41	Hot rolled (including structural shapes under 3 inches)	(D)	(D)	225,069	291,392	(D)	(D)	(D)	(D)
33168 31	Cold finished								
	Tool steel:	(D)	(D)	16,971	120,633	(D)	(D)	(D)	(D)
33124 48	High speed	(D)	(D)	55,668	144,727	(D)	(D)	(D)	(D)
33124 49	Other than high speed								
	Pipe and tubes:	(D)	(D)	373,449	308,255	(D)	(D)	(D)	(D)
33176 32	Oil country goods and line pipe	(D)	(D)	20,182	50,193	(D)	(D)	(D)	(D)
33176 43	Pressure tubing	(D)	(D)	462,991	655,129	(D)	(D)	(D)	(D)
33176 45	Mechanical tubing								
33176 48	Miscellaneous (including standard and structural)	(D)	(D)	19,500	9,825	(D)	(D)	(D)	(D)
33155 37	Wire (plain and coated)	3,197	3,505	39,264	83,586	(D)	(D)	(D)	(D)
	STAINLESS STEEL								
33122 51	Ingots	(D)	(D)	496,964	617,121	(D)	(D)	(D)	(D)
	Semifinished products:								
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	196,464	(D)	214,286	266,254	68,736	112,008	145,550	154,246
33122 59	Wire rods	25,214	(D)	38,134	84,104	(D)	(D)	(D)	(D)
	Finished products:								
33124 53	Plates and structurals	(D)	(D)	128,834	285,926	(D)	(D)	(D)	(D)
	Sheets and strip:								
	Sheets and strip:	312,541	(D)	400,151	349,004	(D)	(D)	(D)	(D)
33123 51	Hot rolled	106,680	20,372	1,001,589	1,806,925	868,613	1,592,853	132,976	214,072
33167 51	Cold rolled								
	Bars:	(D)	(D)	53,323	157,337	(D)	(D)	(D)	(D)
33124 61	Hot rolled	(D)	(D)	97,194	367,332	(D)	(D)	(D)	(D)
33168 51	Cold finished								
	Pipe and tubes:								
	Pressure tubing:	1,366	(D)	11,193	76,579	(D)	(D)	(D)	(D)
33176 61	Seamless	(D)	(D)	58,224	215,129	(D)	(D)	(D)	(D)
33176 62	Welded								
	Mechanical tubing:	235	(D)	2,260	26,875	(D)	(D)	(D)	(D)
33176 63	Seamless	819	(D)	28,618	133,214	(D)	(D)	(D)	(D)
33176 64	Welded	3,499	1,107	84,377	282,986	(D)	(D)	(D)	(D)
33155 51	Wire								

- Represents zero. (D) Data withheld to avoid disclosing figures for individual companies. In some cases, figures which are otherwise publishable are withheld to avoid indirect disclosing by subtraction from higher-level totals or from related figures.

[1] Product codes in the 33155 series also include products in the 33125 series, the same applies for 33167 and 33127, 33168 and 33128, and 33176 and 33126.

[2] Excludes receipts and shipments of steel processed on a conversion basis for nonsteel producing companies. Receipts data represent receipts at producing mills only and include receipts from domestic sources.

[3] Import receipts of steel mill products for 1984 are as follows: total, 1,855,876 short tons; carbon, 1,786,201 short tons; alloy, 54,190 short tons; stainless 15,485 short tons.

[4] Excludes axles made in establishments classified in industry 3462, iron and steel forgings.

[5] See footnote 4, table 3.

Table 4B. RECEIPTS, CONSUMPTION, AND SHIPMENTS OF STEEL MILL PRODUCTS: 1983

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Receipts[2 3] (quantity)	Steel consumed in producing plants (quantity)	Shipments[2]					
				Total		To other companies		Transfers to other plants of same company	
				Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
	CARBON STEEL								
33122 11	Ingots	408,327	215,332	426,357	93,451	79,065	20,401	347,292	73,050
	Semifinished products:								
33122 13	Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp	3,544,222	376,306	3,704,378	1,075,333	704,433	201,373	2,999,945	873,960
33122 19	Wire rods	2,056,844	54,380	3,017,036	931,934	2,809,303	856,082	207,733	75,852
	Finished products:								
33124 12	Plates	13,566	75,685	2,646,317	1,038,364	2,551,187	1,001,612	95,130	36,752
	Sheets:								
33123 11	Hot-rolled (including enameling sheets)	8,109,411	1,154,936	17,941,626	5,840,505	12,618,113	4,139,240	5,323,513	1,701,265
33167 11	Cold-rolled	1,027,677	392,363	13,365,642	5,853,043	12,086,701	5,281,549	1,278,941	571,494
	Sheets and strip:								
	Galvanized:								
33123 13	Hot dipped	85,676	9,308	5,055,426	2,658,519	4,871,697	2,555,879	183,729	102,640
33123 15	Electrolytic	4,446	(D)	643,609	397,863	(D)	(D)	(D)	(D)
33123 16	All other metallic coated (including long ternes and electrical)	16,485	9,080	1,187,035	678,264	1,115,686	634,813	71,349	43,451
	Strip:								
33123 19	Hot rolled	667,523	47,473	579,571	260,120	544,818	245,089	34,753	15,031
33167 15	Cold rolled	189,834	5,209	1,061,635	821,830	847,727	703,790	213,908	118,040
	Tin-mill products:								
33123 24	Black plate	21,229	(D)	406,601	213,234	(D)	(D)	(D)	(D)
33123 26	Electrolytic and hot-dipped tin plate	(D)	(D)	2,956,395	1,899,402	(D)	(D)	(D)	(D)
33123 27	All other tin mill products (including tin free steel, short ternes, and foil)	(D)	-	972,893	580,334	(D)	(D)	(D)	(D)
33124 15	Structural shapes (heavy), sheet piling and bearing piles	(D)	12,530	2,720,923	970,837	2,680,801	956,359	40,122	14,478
	Bars:								
33124 22	Hot rolled bars except concrete reinforcing	1,020,699	131,222	5,313,277	2,061,516	4,870,569	1,896,885	442,708	164,631
33124 24	Light structurals (under 3")	(D)	(D)	899,854	252,446	(D)	(D)	(D)	(D)
33124 26	Concrete reinforcing bars	(D)	354,227	3,999,278	1,070,859	3,427,942	928,499	571,336	142,360
33168 11	Cold finished bars	43,092	99	1,090,745	801,944	1,086,276	798,789	(D)	(D)
33124 29	Tool steel	(D)	(D)	836	4,053	(D)	(D)	(D)	(D)
	Rails, wheels, and track accessories:								
	Rails:								
3312C 11	Standard tee (over 60 lb. per yard)	(D)	(D)	589,430	230,301	(D)	(D)	(D)	(D)
3312C 13	All other rails, including light (60 lb. per yard and under)	(D)	(D)	r26,758	r12,931	(D)	(D)	(D)	(D)
3312C 15	Joint bars	(D)	(D)	r16,190	r19,095	(D)	(D)	(D)	(D)
3312C 17	Tie plates	(D)	(D)	114,073	48,036	(D)	(D)	(D)	(D)
3312C 19	Wheels (rolled and forged)	(D)	(D)	52,239	40,684	(D)	(D)	(D)	(D)
3312C 21	Axles (rolled and forged)[4]	(D)	(D)	r6,100	r5,469	(D)	(D)	(D)	(D)
3312C 23	Track spikes	-	-	55,673	27,671	(D)	(D)	(D)	(D)
	Pipe and tubes:								
33176 1	Line pipe	(D)	(D)	722,415	393,540	715,650	389,095	6,765	4,445
33176 15	Oil country goods	(D)	(D)	766,151	490,499	(D)	(D)	(D)	(D)
	Pressure tubing:								
33176 21	Seamless	(D)	(D)	58,017	74,153	(D)	(D)	(D)	(D)
33176 22	Welded	(D)	(D)	94,417	112,083	(D)	(D)	(D)	(D)
	Mechanical tubing:								
33176 23	Seamless	(D)	(D)	77,149	100,929	(D)	(D)	(D)	(D)
33176 24	Welded	33,768	41,285	1,619,307	1,208,620	1,550,351	1,158,031	68,956	50,589
33176 27	Structurals	35	(D)	533,160	245,956	(D)	(D)	(D)	(D)
33176 29	Miscellaneous (including standard pipe)	22,213	15,019	1,044,283	614,614	1,025,870	601,326	18,413	13,288
	Wire:								
33155 11	Plain wire	247,507	593,469	1,507,382	859,934	1,328,630	766,953	178,752	92,981
33155 15	Galvanized wire	51,143	60,507	258,481	168,205	232,545	147,739	25,936	20,466
33155 19	Other coated wire	13,052	(D)	148,172	155,612	120,716	136,078	27,456	19,534
	Wire products:[5]								
33152 21	Nails and staples	3,164	(D)	343,250	294,184	(D)	(D)	(D)	(D)
33159 51	Barbed and twisted wire	(D)	(D)	79,516	57,626	(D)	(D)	(D)	(D)
33156 21	Wire fence, woven and welded	(D)	-	239,055	159,908	(D)	(D)	(D)	(D)
33159 55	Bale ties	(D)	(D)	39,027	25,465	38,819	25,330	208	135
33151 11	Wire rope and cable	(D)	(D)	159,636	282,308	151,861	266,195	7,775	16,113
	Wire strand:								
33151 33	For prestressed concrete	-	-	137,972	79,535	137,972	79,535	-	-
33151 35	Other	(D)	(D)	113,979	88,854	108,633	85,833	5,346	3,021
33157 71	Woven wire netting	-	-	72,648	61,681	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 4B. RECEIPTS, CONSUMPTION, AND SHIPMENTS OF STEEL MILL PRODUCTS: 1983--Continued

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Receipts[2] [3] (quantity)	Steel consumed in producing plants (quantity)	Shipments[2] Total Quantity	Total Value f.o.b. plant	To other companies Quantity	To other companies Value f.o.b. plant	Transfers to other plants of same company Quantity	Transfers to other plants of same company Value f.o.b. plant
	ALLOY STEEL								
33122 31	Ingots	146,300	354,559	166,180	116,778	32,881	21,976	133,299	94,802
	Semifinished products:								
33122 36	Blooms, billets, slabs, sheet bars, rounds, and skelp	370,886	149,985	581,429	376,398	274,379	195,145	307,050	181,253
33122 39	Wire rods	10,045	(D)	26,100	19,646	(D)	(D)	(D)	(D)
	Finished products:								
33124 31 33124 34 33124 35	Plates and structural shapes (3 inches and over)	11,731	40,796	1,351,994	771,264	1,311,611	751,256	40,383	20,008
	Sheets and strip:								
	Sheets:								
33123 31	Hot rolled	108,042	27,302	1,146,325	514,756	946,361	441,123	199,964	73,633
33167 31	Cold rolled	(D)	(D)	351,272	256,169	(D)	(D)	(D)	(D)
33123 34	Galvanized, electrical, and metallic coated	(D)	(D)	361,975	327,329	(D)	(D)	(D)	(D)
	Strip:								
33123 32	Hot rolled	24,025	(D)	77,135	47,053	(D)	(D)	(D)	(D)
33167 35	Cold rolled	22,722	(D)	162,441	243,073	(D)	(D)	(D)	(D)
	Bars:								
33124 41	Hot rolled (including structural shapes under 3 inches)	112,298	31,364	1,336,762	849,245	1,252,866	795,685	83,896	53,560
33168 31	Cold finished	(D)	(D)	153,775	195,977	(D)	(D)	(D)	(D)
	Tool steel:								
33124 48	High speed	(D)	(D)	11,294	74,909	8,973	69,977	2,321	4,932
33124 49	Other than high speed	(D)	(D)	36,702	106,640	(D)	(D)	(D)	(D)
	Pipe and tubes:								
33176 32	Oil country goods and line pipe	(D)	(D)	179,550	150,515	(D)	(D)	(D)	(D)
33176 43	Pressure tubing	(D)	(D)	23,331	61,891	(D)	(D)	(D)	(D)
33176 45	Mechanical tubing	(D)	(D)	376,740	344,188	(D)	(D)	(D)	(D)
33176 48	Miscellaneous (including standard and structural)	(D)	(D)	14,518	8,747	(D)	(D)	(D)	(D)
33155 37	Wire (plain and coated)	2,852	(D)	32,351	60,375	(D)	(D)	(D)	(D)
	STAINLESS STEEL								
33122 51	Ingots	(D)	(D)	221,629	273,132	(D)	(D)	(D)	(D)
	Semifinished products:								
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	145,444	4,147	311,234	240,052	77,839	100,311	133,425	139,741
33122 59	Wire rods	(D)	(D)	26,013	54,922	26,015	54,922	-	-
	Finished products:								
33124 53	Plates and structurals	(D)	(D)	113,691	256,525	(D)	(D)	(D)	(D)
	Sheets and strip:								
	Sheets and strip:								
33123 51	Hot rolled	321,444	(D)	402,508	352,217	98,604	105,152	303,904	247,065
33167 51	Cold rolled	97,608	18,621	816,258	1,490,752	771,588	1,370,698	44,670	120,054
	Bars:								
33124 61	Hot rolled	8,809	(D)	40,344	128,971	32,048	113,877	8,296	15,094
33168 51	Cold finished	(D)	(D)	68,243	255,170	67,902	254,245	341	925
	Pipe and tubes:								
	Pressure tubing:								
33176 61	Seamless	(D)	(D)	12,081	88,168	(D)	(D)	(D)	(D)
33176 62	Welded	(D)	(D)	49,109	180,334	(D)	(D)	(D)	(D)
	Mechanical tubing:								
33176 63	Seamless	(D)	(D)	2,579	22,935	(D)	(D)	(D)	(D)
33176 64	Welded	(D)	(D)	24,855	110,108	(D)	(D)	(D)	(D)
33155 51	Wire	2,954	1,248	68,637	324,918	(D)	(D)	(D)	(D)

- Represents zero. (D) Data withheld to avoid disclosing figures for individual companies. In some cases, figures which are otherwise publishable are withheld to avoid indirect disclosing by subtraction from higher-level totals or from related figures. [7]Revised by 5 percent or more from previously published figures.

[1]Product codes in the 33155 series also include products in the 33125 series, the same applies for 33167 and 33127, 33168 and 33128, and 33176 and 33126.

[2]Excludes receipts and shipments of steel processed on a conversion basis for nonsteel producing companies. Receipts data represent receipts at producing mills only and include receipts from domestic sources.

[3]Import receipts of steel mill products for 1983 are as follows: total, 1,276,425 short tons; carbon, 1,234,220 short tons; alloy, 25,409 short tons; stainless 16,796 short tons.

[4]Excludes axles made in establishments classified in industry 3462, iron and steel forgings.

[5]See footnote 4, table 3.

Table 5. CONSUMPTION OF STEEL MILL PRODUCTS BY STEEL MILLS IN THE PRODUCTION OF FABRICATED PRODUCTS AND FOR MAINTENANCE, REPAIR, AND OPERATING SUPPLIES (MRO): 1984 AND 1983

(Short tons)

Product description	1984	1983
Steel mill shapes and forms (all grades)	4,488,189	4,372,833
Carbon steel:		
Bars and tool steel	577,317	593,992
Sheet and strip	1,377,879	1,618,505
Plates	102,053	75,685
Wire and wire products	709,120	654,945
All other carbon steel mill shapes and forms	1,076,287	755,477
Alloy steel (except stainless)	599,995	633,735
Stainless steel	45,538	40,494

Table 6A. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, INCLUDING INTERPLANT TRANSFERS, BY PRODUCT CLASS, BY GEOGRAPHIC AREA: 1984

(Quantity in short tons; value in thousands of dollars)

Geographic area	Total 3312 pt.		33122--Steel ingot and semifinished shapes		33123--Hot rolled sheet and strip including tin mill products	
	Quantity	Value	Quantity	Value	Quantity	Value
United States	91,086,493	45,921,439	9,152,187	3,885,608	33,292,495	14,555,937
Northeast	16,823,321	11,364,933	3,189,485	1,873,194	3,628,208	2,117,034
New England	376,415	535,526	(1)	(1)	(AA)	14,158
Massachusetts and Maine	93,721	144,030	(1)	(1)	(AA)	(AA)
Rhode Island	13,333	14,778	-	-	-	-
Connecticut	269,361	376,719	-	-	(AA)	(CC)
Middle Atlantic	16,446,906	10,829,407	[1]3,189,485	[1]1,873,194	3,625,236	2,097,876
New York	1,480,304	949,376	(EE)	(EE)	(EE)	(FF)
New Jersey	1,057,637	434,933	(FF)	(FF)	-	-
Pennsylvania	13,908,964	9,445,097	2,402,511	1,532,934	3,174,173	1,855,083
North Central	51,910,588	24,455,432	2,745,562	997,233	(FF)	(FF)
East North Central	49,192,175	2,339,696	2,202,842	830,753	23,521,967	9,441,475
Ohio	16,681,464	8,492,251	1,292,057	482,091	7,443,133	2,758,160
Indiana	18,226,283	8,443,056	(FF)	202,732	9,237,825	4,122,832
Illinois	6,904,795	3,258,411	344,193	136,171	2,307,300	997,417
Michigan	7,260,115	3,080,026	(CC)	(BB)	4,533,709	1,563,066
Wisconsin	119,518	125,952	(AA)	(AA)	-	-
West North Central	2,718,413	1,055,736	(FF)	166,480	(AA)	(AA)
Minnesota	992,237	329,783	(AA)	(AA)	(AA)	(AA)
Iowa	105,979	64,027	-	-	-	-
Missouri	1,175,241	513,580	(FF)	(EE)	-	-
Nebraska	444,956	148,346	-	-	-	-
South	18,182,219	8,090,279	3,057,484	969,355	5,126,046	2,488,555
South Atlantic	8,253,005	3,872,200	1,116,630	382,134	3,407,824	1,734,828
Delaware	182,096	84,606	-	-	-	-
Maryland	2,963,427	1,666,032	(EE)	(EE)	(FF)	(FF)
Virginia	321,814	106,307	-	-	-	-
West Virginia	2,245,342	1,157,180	(CC)	(CC)	(FF)	(FF)
North Carolina	190,857	72,151	(CC)	(BB)	-	-
South Carolina	1,175,649	363,165	(FF)	(EE)	(BB)	(CC)
Georgia	520,717	177,815	(EE)	(CC)	-	-
Florida	653,103	244,944	(AA)	(AA)	-	-
East South Central	4,808,747	2,249,803	593,372	232,353	1,518,770	667,459
Kentucky	2,128,963	887,162	(FF)	(EE)	(FF)	(FF)
Tennessee	951,155	513,939	(CC)	(EE)	(BB)	(CC)
Alabama	1,537,918	769,560	(BB)	(AA)	(EE)	(FF)
Mississippi	190,711	79,142	-	-	-	-
West South Central	5,120,467	1,968,276	1,347,482	354,868	199,452	86,268
Arkansas	72,114	58,520	-	-	-	-
Louisiana	920,631	249,816	(EE)	(EE)	(AA)	(AA)
Oklahoma	303,588	132,532	-	-	-	-
Texas	3,824,134	1,527,408	(FF)	(FF)	(EE)	85,817
West	4,170,335	2,010,795	159,656	45,826	1,014,396	513,190
Mountain	791,254	461,651	(BB)	(BB)	-	-
Colorado	539,952	308,618	(BB)	(BB)	-	-
Arizona	101,451	72,440	-	-	-	-
Utah	149,851	80,593	-	-	-	-
Pacific	3,379,081	1,549,144	(EE)	(EE)	1,014,396	513,190
Washington	406,294	159,882	(CC)	(CC)	-	-
Oregon	416,442	146,894	(AA)	(AA)	-	-
California	2,532,432	1,232,714	(CC)	(CC)	(FF)	(FF)
Hawaii	23,913	9,654	-	-	(AA)	(AA)

See footnotes at end of table.

Table 6A. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, INCLUDING INTERPLANT TRANSFERS, BY PRODUCT CLASS, BY GEOGRAPHIC AREA: 1984--Continued

(Quantity in short tons; value in thousands of dollars)

Geographic area	33124--Steel plates, structural shapes and piling, and hot-rolled bars and bar shapes		33125 and 33155--Steel wire		33126 and 33176--Steel pipe and tube	
	Quantity	Value	Quantity	Value	Quantity	Value
United States	20,470,232	8,712,737	2,095,894	1,614,795	7,030,621	5,564,188
Northeast	4,288,537	2,352,541	357,302	446,847	1,337,568	1,276,870
New England	(AA)	(AA)	115,164	120,923	6,842	22,701
Massachusetts and Maine	(AA)	(AA)	47,012	56,763	(AA)	(BB)
Rhode Island	-	-	-	-	-	-
Connecticut	(AA)	(AA)	68,152	64,160	(AA)	(CC)
Middle Atlantic	4,288,383	2,352,040	242,338	325,924	1,330,726	1,254,169
New York	639,940	325,556	17,798	22,020	32,178	55,622
New Jersey	(EE)	(AA)	49,946	41,840	113,555	143,895
Pennsylvania	3,421,714	2,026,456	174,594	262,064	1,184,993	1,054,652
North Central	8,497,977	3,693,123	864,254	603,529	3,551,232	2,716,340
East North Central	7,036,873	3,249,741	757,574	550,051	3,016,929	2,370,482
Ohio	1,721,083	969,941	155,817	125,981	1,713,977	1,447,906
Indiana	3,226,087	1,406,733	100,834	67,344	193,896	175,041
Illinois	1,963,943	810,253	355,136	235,884	839,619	504,561
Michigan	(EE)	(EE)	143,549	117,321	212,565	170,768
Wisconsin	(AA)	(AA)	(AA)	(AA)	56,872	72,206
West North Central	1,461,104	443,382	106,680	53,478	534,303	345,858
Minnesota	(FF)	(FF)	-	-	(CC)	(CC)
Iowa	-	-	-	-	(CC)	(EE)
Missouri	(EE)	(EE)	106,680	53,478	348,054	210,800
Nebraska	(EE)	(EE)	-	-	(CC)	(CC)
South	6,236,120	2,112,054	609,615	419,556	1,557,845	1,184,881
South Atlantic	2,441,105	913,892	219,022	162,505	60,047	83,540
Delaware	(EE)	(EE)	(AA)	(AA)	-	-
Maryland	(EE)	(FF)	37,424	66,209	(AA)	(BB)
Virginia	(EE)	(EE)	(BB)	(AA)	(AA)	(CC)
West Virginia	(BB)	(CC)	-	-	(BB)	(CC)
North Carolina	(EE)	(CC)	(AA)	(CC)	(AA)	(CC)
South Carolina	(FF)	(EE)	(CC)	(CC)	-	-
Georgia	(EE)	(EE)	(CC)	(CC)	(BB)	(CC)
Florida	(FF)	(EE)	53,551	30,320	17,538	(CC)
East South Central	1,169,125	397,317	304,022	209,684	685,495	444,292
Kentucky	(EE)	(EE)	(CC)	50,406	(EE)	(EE)
Tennessee	(EE)	(EE)	132,756	86,881	147,517	105,232
Alabama	(EE)	(EE)	(CC)	(CC)	341,122	230,044
Mississippi	(EE)	(CC)	(CC)	(CC)	-	-
West South Central	2,625,890	900,845	86,571	47,367	812,303	657,049
Arkansas	(AA)	(AA)	(CC)	(CC)	(AA)	(CC)
Louisiana	(EE)	(EE)	(AA)	(AA)	(EE)	67,884
Oklahoma	(EE)	(EE)	-	-	(CC)	(EE)
Texas	2,058,272	648,925	57,209	29,495	637,621	497,341
West	1,447,598	555,019	264,523	144,863	583,976	386,097
Mountain	236,390	134,756	31,946	19,199	131,363	132,408
Colorado	(BB)	(AA)	(CC)	(CC)	(EE)	(EE)
Arizona	(BB)	(EE)	(AA)	(AA)	(CC)	(CC)
Utah	(EE)	(EE)	-	-	-	-
Pacific	1,211,208	420,263	232,577	125,664	452,613	253,689
Washington	(EE)	(EE)	(CC)	(CC)	(CC)	(CC)
Oregon	(EE)	(EE)	-	-	(AA)	(AA)
California	613,235	211,412	(EE)	106,473	425,341	227,320
Hawaii	(BB)	(BB)	-	-	-	-

See footnotes at end of table.

Table 6A. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, INCLUDING INTERPLANT TRANSFERS, BY PRODUCT CLASS, BY GEOGRAPHIC AREA: 1984--Continued

(Quantity in short tons; value in thousands of dollars)

Geographic area	33127 and 33167--Cold rolled sheet and strip		33128 and 33168--Cold finished steel bar and shape		3312C--Other steel mill products except wire products	
	Quantity	Value	Quantity	Value	Quantity	Value
United States	16,183,215	9,398,673	1,631,422	1,633,555	1,230,427	555,946
Northeast	3,065,501	2,446,794	333,652	561,706	622,868	294,947
New England	214,709	346,340	36,574	30,903	-	-
Massachusetts and Maine	(BB)	(EE)	(BB)	(BB)	-	-
Rhode Island	(BB)	(CC)	-	-	-	-
Connecticut	164,072	260,960	(CC)	(CC)	-	-
Middle Atlantic	2,850,792	2,100,454	297,078	530,803	622,868	294,947
New York	125,990	91,257	(CC)	61,087	(BB)	(CC)
New Jersey	(BB)	(CC)	(CC)	(CC)	-	-
Pennsylvania	2,711,611	1,984,057	234,803	454,518	604,565	275,333
North Central	11,444,384	5,990,852	1,211,882	984,543	(CC)	27,654
East North Central	11,444,384	5,990,852	1,143,672	940,620	67,934	25,722
Ohio	3,896,225	2,321,028	458,989	387,143	(AA)	(AA)
Indiana	4,548,087	2,166,754	306,229	275,899	(CC)	(CC)
Illinois	939,097	466,550	155,507	107,565	-	-
Michigan	2,060,975	1,036,510	162,759	119,888	-	-
Wisconsin	-	-	(CC)	(EE)	-	-
West North Central	-	-	68,210	43,923	(AA)	(AA)
Minnesota	-	-	-	-	-	-
Iowa	-	-	(BB)	(BB)	-	-
Missouri	-	-	(CC)	(CC)	(AA)	(AA)
Nebraska and Kansas	-	-	(BB)	(AA)	-	-
South	1,460,300	813,010	63,173	69,121	71,636	33,747
South Atlantic	947,680	529,590	47,903	58,049	(BB)	(BB)
Delaware	-	-	-	-	-	-
Maryland	(FF)	(FF)	(BB)	(CC)	-	-
Virginia	-	-	(AA)	(BB)	(AA)	(AA)
West Virginia	(EE)	(EE)	-	-	(BB)	(BB)
North Carolina	-	-	-	-	-	-
South Carolina	(CC)	(CC)	(CC)	(CC)	-	-
Georgia	-	-	-	-	-	-
Florida	-	-	-	-	-	-
East South Central	508,610	281,302	(BB)	(BB)	(BB)	(BB)
Kentucky	(CC)	(CC)	(AA)	(AA)	-	-
Tennessee	(EE)	(EE)	(AA)	(AA)	(BB)	(BB)
Alabama	(EE)	(EE)	-	-	-	-
Mississippi	(AA)	(BB)	(BB)	(BB)	-	-
West South Central	4,010	2,118	(AA)	(AA)	(CC)	(CC)
Arkansas	-	-	-	-	(CC)	(CC)
Louisiana	(AA)	(AA)	-	-	(AA)	(BB)
Oklahoma	-	-	-	-	-	-
Texas	(AA)	(AA)	(AA)	(AA)	(AA)	(AA)
West	213,030	148,017	22,715	18,185	464,441	199,598
Mountain	(AA)	(BB)	-	-	(EE)	(EE)
Colorado	(AA)	(AA)	-	-	(EE)	(EE)
Arizona	(AA)	(BB)	-	-	-	-
Utah	-	-	-	-	-	-
Pacific	(EE)	(EE)	22,715	18,185	(CC)	(CC)
Washington	-	-	-	-	(CC)	(CC)
Oregon	(BB)	(BB)	-	-	-	-
California	(EE)	(EE)	22,715	18,185	-	-
Hawaii	-	-	-	-	-	-

Note: States not listed had no shipments. In some cases, data are withheld to avoid disclosing information relating to the operations of individual companies. In such cases, the quantity and value of shipments are expressed in terms of the ranges below:

Quantity (short tons)	Value (thousands of dollars)
(AA) 1 to 4,999	(AA) 1 to 1,999
(BB) 5,000 to 19,999	(BB) 2,000 to 9,999
(CC) 20,000 to 99,999	(CC) 10,000 to 49,999
(EE) 100,000 to 499,999	(EE) 50,000 to 199,999
(FF) 500,000 and over	(FF) 200,000 and over

- Represents zero.

[1] Data for Massachusetts and Maine is included with data for New Jersey and the Middle Atlantic Division.

Table 6B. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, INCLUDING INTERPLANT TRANSFERS, BY PRODUCT CLASS, BY GEOGRAPHIC AREA: 1983

(Quantity in short tons; value in thousands of dollars)

Geographic area	Total 3312 pt.		33122--Steel ingot and semifinished shapes		33123--Hot rolled sheet and strip including tin mill products	
	Quantity	Value	Quantity	Value	Quantity	Value
United States	84,127,416	40,804,251	8,380,372	3,181,646	31,735,530	13,770,517
Northeast	16,539,526	10,305,396	3,292,346	1,536,405	3,645,087	1,981,837
New England	356,917	484,589	(1)	(1)	(AA)	(BB)
Massachusetts and Maine	93,980	140,980	(1)	(1)	(AA)	(AA)
Rhode Island	12,172	12,565	-	-	-	-
Connecticut	250,765	331,134	-	-	(AA)	(BB)
Middle Atlantic	16,182,609	9,820,807	[1]3,292,346	[1]1,536,405	(FF)	(FF)
New York	1,991,514	1,129,297	437,859	194,845	(EE)	(FF)
New Jersey	864,794	355,168	[1]548,627	[1]165,600	-	-
Pennsylvania	13,326,301	8,336,342	2,305,860	1,175,960	3,208,881	1,762,434
North Central	47,941,322	22,067,948	2,501,233	886,114	22,494,867	9,071,549
East North Central	45,642,058	21,283,397	(FF)	(FF)	(FF)	(FF)
Ohio	14,221,980	7,390,267	951,206	404,342	6,184,610	2,381,765
Indiana	18,230,310	8,039,486	530,579	160,305	10,029,980	4,269,930
Illinois	6,425,831	2,917,983	592,225	195,803	(FF)	(FF)
Michigan	6,662,862	2,829,600	(BB)	(BB)	4,184,201	1,519,778
Wisconsin	101,075	106,061	(AA)	(AA)	-	-
West North Central	2,299,264	784,551	(EE)	(EE)	(AA)	(AA)
Minnesota	974,645	286,397	(AA)	(AA)	(AA)	(AA)
Iowa	71,762	37,510	-	-	-	-
Missouri	873,516	338,723	(EE)	(EE)	-	-
Nebraska	379,341	121,921	-	-	-	-
South	15,265,592	6,419,078	2,303,248	682,336	4,315,799	2,062,509
South Atlantic	7,458,196	3,378,020	934,453	284,952	2,993,088	1,527,781
Delaware	189,273	84,801	-	-	-	-
Maryland	2,699,216	1,463,011	(EE)	(EE)	(FF)	(FF)
Virginia	246,249	78,012	-	-	-	-
West Virginia	1,941,670	1,008,105	(CC)	(BB)	(FF)	(FF)
North Carolina	182,250	63,695	(CC)	(BB)	-	-
South Carolina	1,187,959	331,140	490,905	(EE)	(CC)	(CC)
Georgia	423,355	143,738	(CC)	(CC)	-	-
Florida	588,224	205,518	(AA)	(AA)	-	-
East South Central	3,473,717	1,500,249	221,612	128,356	1,228,780	488,519
Kentucky	1,557,010	657,249	(EE)	(CC)	(FF)	(FF)
Tennessee	667,466	337,651	(CC)	(EE)	(CC)	(CC)
Alabama	1,042,242	432,581	(BB)	(AA)	(EE)	(EE)
Mississippi	206,999	72,768	(AA)	(AA)	-	-
West South Central	4,333,679	1,540,809	1,147,183	269,028	93,931	46,209
Arkansas	34,444	14,486	-	-	-	-
Louisiana	644,054	158,920	(EE)	(EE)	(AA)	(AA)
Oklahoma	311,277	116,409	(CC)	(BB)	-	-
Texas	3,343,904	1,230,994	786,601	200,496	(CC)	(CC)
West	4,380,976	2,011,829	283,545	76,791	1,279,777	654,622
Mountain	876,037	347,087	55,001	13,950	-	-
Colorado	442,304	201,020	(CC)	(CC)	-	-
Arizona	141,566	69,847	-	-	-	-
Utah	292,167	76,220	(BB)	(BB)	-	-
Pacific	3,504,939	1,664,742	228,544	62,841	1,279,777	654,622
Washington	330,256	137,314	(CC)	(CC)	-	-
Oregon	356,671	125,744	(AA)	(AA)	-	-
California	2,787,699	1,389,541	(EE)	(CC)	(FF)	(FF)
Hawaii	30,313	12,143	-	-	(AA)	(AA)

See footnotes at end of table.

Table 6B. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, INCLUDING INTERPLANT TRANSFERS, BY PRODUCT CLASS, BY GEOGRAPHIC AREA: 1983--Continued

(Quantity in short tons; value in thousands of dollars)

Geographic area	33124--Steel plates, structural shapes and piling, and hot-rolled bars and bar shapes		33125 and 33155--Steel wire		33126 and 33176--Steel pipe and tube	
	Quantity	Value	Quantity	Value	Quantity	Value
United States	18,471,035	7,585,629	2,015,023	1,469,044	5,594,962	4,495,270
Northeast	4,202,767	2,218,561	336,261	373,403	1,359,641	1,275,055
New England	237	513	109,178	112,601	14,616	32,918
Massachusetts and Maine	(AA)	(AA)	44,389	50,535	(BB)	(CC)
Rhode Island	-	-	-	-	-	-
Connecticut	(AA)	(AA)	64,789	62,066	(AA)	(CC)
Middle Atlantic	4,202,530	2,218,048	227,083	260,802	1,345,025	1,242,137
New York	(FF)	(FF)	31,972	29,250	29,737	(EE)
New Jersey	(EE)	(CC)	42,665	35,819	88,149	(EE)
Pennsylvania	3,347,164	1,802,114	152,446	195,733	1,227,139	1,067,584
North Central	6,955,029	2,977,469	830,579	576,376	2,633,199	2,043,462
East North Central	5,593,176	2,604,050	724,572	523,817	2,269,446	1,838,248
Ohio	1,346,303	768,160	161,844	134,168	1,161,786	1,101,113
Indiana	2,363,607	1,030,734	(EE)	(EE)	153,659	131,119
Illinois	1,756,103	742,722	326,174	210,987	717,976	400,800
Michigan	(EE)	(EE)	123,793	101,623	184,390	142,232
Wisconsin	(AA)	(AA)	(AA)	(BB)	51,635	62,984
West North Central	1,361,853	373,419	106,007	52,559	363,753	205,214
Minnesota	934,046	247,171	-	-	(CC)	(CC)
Iowa	-	-	-	-	(CC)	(CC)
Missouri	98,748	36,442	106,007	52,559	218,950	107,205
Nebraska	329,059	89,806	-	-	(CC)	(CC)
South	5,788,248	1,881,315	575,416	373,718	1,071,492	797,915
South Atlantic	2,298,514	826,754	221,891	159,225	109,457	104,158
Delaware	(EE)	(EE)	(AA)	(AA)	-	-
Maryland	(EE)	(FF)	61,655	75,691	(CC)	(CC)
Virginia	(EE)	(EE)	(AA)	(AA)	(AA)	(BB)
West Virginia	(CC)	(CC)	-	-	(CC)	(CC)
North Carolina	(EE)	(CC)	(AA)	(BB)	(AA)	(BB)
South Carolina	(FF)	(EE)	(CC)	(CC)	-	-
Georgia	(EE)	(EE)	(CC)	(CC)	(BB)	(CC)
Florida	(FF)	(EE)	(CC)	(CC)	(BB)	(CC)
East South Central	1,035,155	323,842	270,821	172,062	429,770	252,055
Kentucky	239,978	91,449	69,635	45,884	(EE)	(EE)
Tennessee	(EE)	(EE)	107,284	71,205	(EE)	(EE)
Alabama	(EE)	(EE)	(CC)	(CC)	149,724	79,237
Mississippi	(EE)	(CC)	(CC)	(CC)	-	-
West South Central	2,454,579	730,719	82,704	42,431	532,265	441,702
Arkansas	11,897	2,704	(BB)	(CC)	(AA)	(CC)
Louisiana	(EE)	(EE)	(AA)	(AA)	54,732	36,494
Oklahoma	(EE)	(EE)	-	-	(CC)	(CC)
Texas	1,943,179	601,774	62,184	30,562	437,136	343,776
West	1,524,991	508,284	272,767	145,547	530,630	378,838
Mountain	505,550	155,499	38,030	21,352	65,780	66,838
Colorado	(EE)	(CC)	(CC)	(CC)	(CC)	(EE)
Arizona	(EE)	(EE)	900	(AA)	(CC)	(CC)
Utah	(EE)	(EE)	-	-	-	-
Pacific	1,019,441	352,785	234,737	124,195	464,850	312,000
Washington	(EE)	(EE)	(CC)	(CC)	(CC)	(CC)
Oregon	(EE)	(EE)	-	-	(AA)	(AA)
California	484,127	176,508	(EE)	(EE)	437,329	287,390
Hawaii	(CC)	(CC)	-	-	-	-

See footnotes at end of table.

Table 6B. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, INCLUDING INTERPLANT TRANSFERS, BY PRODUCT CLASS, BY GEOGRAPHIC AREA: 1983--Continued

(Quantity in short tons; value in thousands of dollars)

Geographic area	33127 and 33167--Cold rolled sheet and strip		33128 and 33168--Cold finished steel bar and shape		3312C--Other steel mill products except wire products	
	Quantity	Value	Quantity	Value	Quantity	Value
United States	15,757,248	8,664,867	1,312,783	1,253,091	860,463	384,187
Northeast	3,013,185	2,300,918	269,885	416,916	420,354	202,301
New England	198,997	302,311	(CC)	(CC)	-	-
Massachusetts and Maine	(CC)	(EE)	(AA)	(BB)	-	-
Rhode Island	(BB)	(CC)	-	-	-	-
Connecticut	152,396	223,321	(CC)	(CC)	-	-
Middle Atlantic	2,814,188	1,998,607	(EE)	(FF)	420,354	202,301
New York	(EE)	(EE)	(CC)	(EE)	(AA)	(CC)
New Jersey	(BB)	(CC)	(BB)	(CC)	-	-
Pennsylvania	2,495,037	1,818,494	179,775	326,443	(EE)	(EE)
North Central	11,425,854	5,691,831	954,857	762,799	145,704	58,348
East North Central	11,425,854	5,691,831	907,007	729,944	(EE)	(EE)
Ohio	4,067,052	2,318,544	349,077	282,163	(AA)	(AA)
Indiana	4,640,210	2,087,836	259,590	229,875	(EE)	(EE)
Illinois	812,243	380,023	127,213	88,107	(AA)	(AA)
Michigan	1,906,349	905,428	(EE)	(EE)	-	-
Wisconsin	-	-	(CC)	(EE)	-	-
West North Central	-	-	47,850	32,855	(AA)	(AA)
Minnesota	-	-	-	-	-	-
Iowa	-	-	(BB)	(BB)	-	-
Missouri	-	-	(CC)	(CC)	(AA)	(AA)
Nebraska and Kansas	-	-	(BB)	(BB)	-	-
South	1,109,937	547,773	62,475	54,645	38,977	18,867
South Atlantic	849,709	428,442	40,223	40,433	(BB)	(BB)
Delaware	-	-	-	-	-	-
Maryland	(FF)	(FF)	(BB)	(CC)	-	-
Virginia	-	-	1,812	1,935	(AA)	(AA)
West Virginia	(EE)	(EE)	-	-	(BB)	(BB)
North Carolina	-	-	-	-	-	-
South Carolina	(CC)	(CC)	(CC)	(CC)	-	-
Georgia	-	-	-	-	-	-
Florida	-	-	-	-	-	-
East South Central	(EE)	(EE)	19,254	11,705	(BB)	(BB)
Kentucky	(CC)	(CC)	(AA)	(AA)	-	-
Tennessee	-	-	-	-	(BB)	(BB)
Alabama	(EE)	(EE)	(BB)	(BB)	-	-
Mississippi	(AA)	(BB)	(BB)	(BB)	-	-
West South Central	(AA)	(BB)	2,998	2,507	16,216	6,092
Arkansas	-	-	-	-	-	-
Louisiana	(AA)	(AA)	-	-	(AA)	(BB)
Oklahoma	-	-	-	-	-	-
Texas	(AA)	(AA)	2,998	2,507	(BB)	(BB)
West	208,272	124,345	25,566	18,731	255,428	104,671
Mountain	(AA)	(BB)	-	-	211,095	85,364
Colorado	(AA)	(AA)	-	-	211,095	85,364
Arizona	(AA)	(BB)	-	-	-	-
Utah	-	-	-	-	-	-
Pacific	(EE)	(EE)	25,566	18,731	44,333	19,307
Washington	(BB)	(BB)	-	-	(CC)	(CC)
Oregon	(BB)	(BB)	-	-	-	-
California	205,691	105,317	25,566	18,731	-	-
Hawaii	-	-	-	-	-	-

Note: States not listed had no shipments. In some cases, data are withheld to avoid disclosing information relating to the operations of individual companies. In such cases, the quantity and value of shipments are expressed in terms of the ranges below:

Quantity (short tons)	Value (thousands of dollars)
(AA) 1 to 4,999	(AA) 1 to 1,999
(BB) 5,000 to 19,999	(BB) 2,000 to 9,999
(CC) 20,000 to 99,999	(CC) 10,000 to 49,999
(EE) 100,000 to 499,999	(EE) 50,000 to 199,999
(FF) 500,000 and over	(FF) 200,000 and over

- Represents zero.

[1] Data for Massachusetts and Maine is included with data for New Jersey and the Middle Atlantic Division.

Table 7. DESCRIPTION OF PRODUCT CLASSES SHOWN IN TABLES 2, 3, 4, AND 5 FOR 1984

Product description	Carbon	Alloy	Stainless
33122 - Steel ingot and semi-finished shapes	Ingots Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp Wire rods	Ingots Blooms, billets, slabs, sheet bars, tube rounds, and skelp Wire rods	Ingots Blooms, billets, slabs, sheet bars, tube rounds, and skelp Wire rods
33123 - Hot-rolled sheet and strip, including tin-mill products	Sheets: hot-rolled Sheets and strip: Galvanized: Hot-dipped Electrolytic All other metallic coated (including long ternes and electrical) Strip - hot-rolled Tin mill products: Black plate Electrolytic and hot-dipped tinplate All other tin mill products (including tin free steel, short ternes and foil)	Sheets: hot-rolled Sheets and strip: Galvanized, electrical, and metallic coated Strip: hot-rolled	Sheets and strip: hot-rolled
33124 - Plates Structural shapes and pilings Hot-rolled bars and shapes	Plates Structural shapes (heavy, sheet pilings, and bearing piles Hot-rolled bars Light structural bars (under 3") Concrete reinforcing bars Tool steel	Plates and structurals (3" and over) Hot-rolled bars including structural shapes (under 3") Tool steel: High speed Other than high speed	Plates and structurals Hot-rolled bars
33125 and 33155 - Steel wire	Plain wire Galvanized wire Other coated wire	Wire (plain and coated)	Wire
33126 and 33176 - Steel pipe and tubes	Pipe and tubes: Line pipe Oil country goods Pressure tubing: Seamless Welded Mechanical tubing: Seamless Welded Structurals Miscellaneous (including standard pipe)	Pipe and tubes: Oil country goods and line pipe Pressure tubing Mechanical tubing Miscellaneous (including standard)	Pipe and tubes: Pressure and tubing: Seamless Welded Mechanical tubing: Seamless Welded
33127 and 33167 - Cold-rolled sheet and strip	Sheets: cold-rolled Strip: cold-rolled	Sheets: cold-rolled Strip: cold-rolled	Sheets and strip: cold-rolled
33128 and 33168 - Cold-finished steel bar and bar shapes	Cold-finished bars	Cold-finished bars	Cold-finished bars
3312C - Other steel mill products	Rails, wheels, and track accessories Rails: Standard tee All other rails Joint bars Tie plates Wheels (rolled and forged) Axles (rolled and forged) Track spikes	(NA)	(NA)

(NA) Not available.

Table 8. QUANTITY AND VALUE OF SHIPMENTS OF STEEL MILL PRODUCTS, BY CLASS OF PRODUCT

(Quantity in short tons; value in millions of dollars)

Product code	Product Description[1]	MA33B						1982 Census of Manufactures (value)[2]
		1984		1983		1982		
		Quantity	Value	Quantity	Value	Quantity	Value	
33122	Steel ingot and semifinished shapes	9,152,187	3,885.6	8,380,372	3,181.6	7,083,845	2,962.8	3,082.0
33123	Hot-rolled sheet and strip, including tin mill products	33,292,495	14,555.9	31,735,530	13,770.5	26,473,857	11,935.4	11,913.5
33124	Hot-rolled bars and bar shapes, plates, structural shapes, and piling	204,700,232	8,712.7	18,471,272	7,585.6	17,792,470	8,262.2	8,218.2
33125 33155	Steel wire	2,095,894	1,614.8	2,015,023	1,469.0	1,793,873	1,347.3	1,392.9
33126 33176	Steel pipe and tube	7,030,621	5,564.2	5,594,962	4,495.3	7,211,024	7,099.3	7,196.9
33127 33167	Cold-rolled steel sheet and strip	16,183,215	9,398.7	15,757,248	8,664.9	12,691,090	6,956.8	6,978.3
33128 33168	Cold-finished steel bars and bar shapes	1,631,422	1,633.6	1,312,783	1,253.1	1,132,247	1,215.5	1,264.3
3312C	Other steel mill products, except wire products (excluding coke oven and blast furnace products and steel forgings)	1,230,427	555.9	860,463	384.2	758,816	409.6	395.6

Note: For 1984, some Current Industrial Reports were benchmarked to the 1982 Census of Manufactures. However, this was not possible for this survey since the product detail does not distinguish between shipments by establishments classified in SIC 3312, blast furnaces and steel mills, and comparable products shipped by establishments classified in SIC 3315, steel wire and related products, SIC 3316, cold finishing of steel shapes, and SIC 3317, steel pipes and tubes.

[1] Excludes shipments of steel processed on a conversion basis for nonsteel producing companies.
[2] Source: Bureau of the Census report MC82-I-33A-1, Blast Furnaces and Steel Works Mills.

Table 9A. SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF STEEL MILL PRODUCTS: 1984

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Manufacturers' shipments[1 2]		Exports of domestic merchandise[1 3]		Estimated producers' value[4]	Percent exports to manufacturers' shipments[2]		Imports for consumption[1 5]		Apparent consumption[2 7 8]		Percent imports to apparent consumption	
		Quantity	Value f.o.b. plant	Quantity	Value at port		Quantity	Value	Quantity	Value c.i.f.[6]	Quantity	Value	Quantity	Value
	Net shipments	[9]74,462,164	(X)	989,037	923,871	846,634	1	(X)	26,602,985	12,208,867	100,076,112	(X)	27	(X)
	Carbon steel	[9]65,874,394	(X)	713,169	580,798	532,243	1	(X)	25,372,757	10,860,671	90,533,982	(X)	28	(X)
	Alloy steel	[9]7,073,028	(X)	235,694	239,878	219,824	3	(X)	969,293	908,633	7,806,627	(X)	12	(X)
	Stainless steel	[9]1,514,652	(X)	40,174	103,195	94,567	3	(X)	260,935	511,563	1,735,413	(X)	15	(X)
	CARBON STEEL													
33122 11	Ingots	368,535	855,562	5,329	1,646	1,508	1	2	1,406,706	316,517	5,646,401	1,489,809	25	21
	Semifinished products:													
33122 13	Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp	3,903,192	1,093,342	26,703	4,478	4,104	(Z)	(Z)	1,439,118	477,877	4,624,277	1,523,639	31	31
33122 19	Wire rods	3,188,297	1,047,138	3,138	1,502	1,376	(Z)	(Z)						
	Finished products:													
33124 12	Plates	3,075,890	1,241,836	62,535	18,100	16,587	(Z)	1	1,807,266	566,658	4,820,621	1,791,907	37	32
	Sheets:													
33123 11	Hot-rolled (including enameling sheets)	19,107,342	6,229,580	35,543	18,069	16,558	(Z)	(Z)	3,013,634	988,897	22,085,433	7,201,919	14	14
33167 11	Cold-rolled	13,502,934	6,121,305	23,409	13,058	11,966	(Z)	(Z)	3,456,035	1,438,620	16,935,560	7,547,959	20	19
	Sheets and strip:													
	Galvanized:													
33123 13	Hot-dipped	5,370,510	3,008,341	31,741	22,883	20,970	(Z)	(Z)	3,006,647	1,625,988	10,288,023	5,790,541	29	28
33123 15	Electrolytic	659,886	428,779											
33123 16	All other metallic coated (including long ternes and electric)	1,322,483	786,414	39,762	41,479	38,011	3	5						
	Strip:													
33123 19	Hot-rolled	588,138	277,402	4,865	4,033	3,696	(Z)	1	79,591	29,527	662,864	303,233	12	9
33167 15	Cold-rolled	1,153,549	921,154	14,484	21,007	19,251	1	2	180,685	185,206	1,319,750	1,087,109	14	17
	Tin mill products:													
33123 24	Black plate	361,730	189,942	38,782	9,778	8,961	11	5	278,003	132,093	600,951	313,074	46	42
33123 26	Electrolytic and hot-dipped tin plate	2,815,079	1,750,739	121,472	59,086	56,146	4	3	355,777	225,562	3,049,384	1,922,155	12	12
33123 27	All other tin mill products (including short ternes and steel foil) tin free steel	958,559	556,822	17,292	11,062	10,137	2	2	17,500	9,609	958,767	556,294	2	2
33124 15	Structural shapes (heavy), sheet piling, and bearing piles	2,808,283	1,013,990	27,206	16,819	15,413	(Z)	2	2,135,719	683,426	4,916,796	1,682,003	43	41
	Bars:	6,187,014	2,481,736	32,162	16,376	15,007	(Z)	(Z)	541,363	212,685	6,696,215	2,679,414	8	8
33124 22	Hot-rolled bars, except concrete reinforcing	943,307	280,280	7,306	5,491	5,032	(Z)	2	163,801	51,772	1,099,802	327,020	15	16
33124 24	Light structurals (under 3")	3,969,198	1,077,945	9,889	4,677	4,286	(Z)	(Z)	431,864	104,148	4,391,173	1,177,807	10	9
33124 26	Concrete reinforcing bars	1,309,159	974,831	13,470	7,314	6,703	1	(Z)	248,462	139,518	1,544,151	1,107,646	16	13
33168 11	Cold-finished bars	1,943	8,359	(NA)	(NA)	(NA)	(NA)	(NA)	7,720	36,246	(NA)	(NA)	(NA)	(NA)
33124 29	Tool steel	893,429	363,938	3,126	2,037	1,867	(Z)	(Z)	136,043	56,093	1,026,346	418,164	13	13
	Rails, wheels, and track accessories:													
	Rails:													
3312C 11	Standard Lee (over 60 lb. per yard)	29,677	15,621	8,015	4,217	3,864	27	25	88,979	28,357	110,641	40,114	80	71
3312C 13	All other rails, including light (60 lbs. per yard and under)	25,571	25,050	4,084	5,115	4,687	2	5	112,960	39,049	296,944	124,902	38	31
3312C 15	Joint bars	162,497	65,490				6	15	20,977	15,265	77,529	58,514	27	26
3312C 17	Tie plates	59,903	50,660	3,351	8,087	7,411	41	58	2,614	4,127	9,741	7,646	27	54
3312C 19	Wheels (rolled and forged)	12,153	8,366	5,026	5,289	4,847	(NA)	(NA)	643	438	(NA)	(NA)	(NA)	(NA)
3312C 21	Axles (rolled and forged)	47,197	26,821	(NA)	(NA)	(NA)								
3312C 23	Track spikes													

See footnotes at end of table.

Table 9A. SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF STEEL MILL PRODUCTS: 1984--Continued

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Manufacturers' shipments[1,2]		Exports of domestic merchandise[1,3]		Estimated producers' value[4]	Percent exports to manufacturers' shipments[2]		Imports for consumption[1,5]		Apparent consumption[2,7,8]		Percent imports to apparent consumption	
		Quantity	Value f.o.b. plant	Quantity	Value at port		Quantity	Value	Quantity	Value c.i.f.[6]	Quantity	Value	Quantity	Value
	CARBON STEEL--Continued													
	Finished products--Continued													
	Pipe and tubes:													
33176 12	Line pipe	877,728	449,069	12,347	14,051	12,876	1	3						
33176 19	Oil country goods	1,357,825	962,232	37,666	57,179	52,399	3	5						
	Seamless tubing:													
33176 21	Pressure	66,011	77,126	6,413	10,259	9,401	3	4						
33176 23	Mechanical	124,164	147,031						5,332,632	2,557,899	11,184,038	6,452,182	48	40
	Welded tubing:													
33176 22	Pressure	107,005	137,783	28,660	30,251	27,722	1	2						
33176 24	Mechanical	1,868,286	1,427,304											
33176 29	Standard and miscellaneous pipe	933,191	587,899	55,931	93,921	86,069	6	15						
33176 27	Structurals	664,841	300,545	6,628	6,808	6,239	1	2						
	Wire:													
33155 11	Plain wire	1,555,586	901,140	7,860	11,652	10,678	1	1	113,166	237,191	1,660,892	1,127,653	7	21
33155 15	Galvanized wire	266,330	175,975	3,969	9,085	8,325	1	2	240,651	173,588	653,349	512,346	37	34
33155 19	Other coated wire	150,337	171,108											
	Wire products:													
33152 21	Nails and staples	344,268	292,928	7,161	24,198	22,175	2	8	458,326	264,465	795,433	535,218	58	49
33159 51	Barbed and twisted wire	62,099	45,915	1,366	3,856	3,534	2	8	27,729	13,691	88,462	56,072	31	24
33156 21	Wire fence, woven and welded	222,855	155,476	(NA)	(NA)	(NA)	(NA)	(NA)	6,878	4,257	(NA)	(NA)	(NA)	(NA)
33159 55	Bale ties	37,760	25,428	(NA)	(NA)	(NA)	(NA)	(NA)	939	717	(NA)	(NA)	(NA)	(NA)
33151 11	Wire rope and cable	192,386	331,636	2,891	8,518	7,806	2	2	76,754	81,645	266,249	405,475	29	20
	Wire strand:													
33151 33	For prestressed concrete	155,657	90,710	193	1,124	1,030	(Z)	1	91,213	49,319	246,677	138,999	37	35
33151 35	Other	130,505	97,826	3,394	8,293	7,600	3	8	92,362	110,221	219,473	200,447	74	55
33157 71	Woven wire netting	79,079	72,401	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	ALLOY STEEL													
33122 31	Ingots	266,553	200,785	18	22	20	(Z)	(Z)						
	Semifinished products:								95,394	77,251	978,159	743,641	10	10
33122 36	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	654,802	472,827	38,572	7,859	7,202	6	2						
33122 39	Wire rods	21,424	18,475	4,781	6,033	5,529	22	30	104,261	57,565	120,904	70,511	86	82
	Finished products:													
33124 31	Plates and structural shapes	1,619,479	893,471	27,474	32,612	29,886	2	3	100,213	79,670	1,692,218	943,255	6	8
33124 35	Sheets and strip:													
	Sheets:													
33123 31	Hot-rolled	1,256,141	552,845	10,700	11,316	10,370	1	2	12,259	6,402	1,257,700	548,877	1	1
22167 31	Cold-rolled	342,650	288,606	6,249	5,082	4,657	2	2	20,953	26,113	357,354	310,062	6	8
33123 34	Galvanized, electrical, and metallic coated	364,914	378,069	12,922	12,511	11,465	4	3	77,572	78,303	429,564	444,907	18	18
	Strip:													
33123 39	Hot-rolled	87,532	50,972	5,747	8,524	7,811	7	15	22,047	48,513	279,848	344,719	8	14
33167 35	Cold-rolled	182,543	260,683	6,527	8,335	7,638	4	29						
	Bars:													
33124 41	Hot rolled (including structural shapes under 3")	1,610,322	1,006,497	51,314	32,937	30,183	3	3	204,741	102,463	1,763,749	1,078,777	12	9
33168 31	Cold-finished	225,069	291,392	11,949	8,344	7,646	5	3	58,564	41,613	271,684	325,359	22	13
	Tool steel:													
33124 48	High speed	16,971	120,633	2,326	7,878	7,219	3	3	73,973	110,370	144,286	368,511	51	30
33124 49	Other than high speed	55,668	144,727											

See footnotes at end of table.

Table 9A. SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF STEEL MILL PRODUCTS: 1984--Continued

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Manufacturers' shipments[1 2]		Exports of domestic merchandise[1 3]		Estimated producers' value[4]	Percent exports to manufacturers' shipments[2]		Imports for consumption[1 5]		Apparent consumption[2 7 8]		Percent imports to apparent consumption	
		Quantity	Value f.o.b. plant	Quantity	Value at port		Quantity	Value	Quantity	Value c.i.f.[6]	Quantity	Value	Quantity	Value
	ALLOY STEEL--Continued													
	Finished products--Continued													
	Pipe and tubes:													
33176 43	Pressure tubing	20,182	50,193											
33176 32	Oil country goods and line pipe	373,449	308,255											
33176 48	Structural and miscellaneous and standard	19,500	9,825	51,419	87,739	80,404	6	8	154,672	230,101	979,375	1,173,099	16	20
33176 45	Mechanical tubing	462,991	655,129											
33155 37	Wire (plain and coated)	39,264	83,586	5,696	10,686	9,793	15	12	44,644	50,259	78,212	124,052	57	41
	STAINLESS STEEL													
33122 51	Ingots	496,964	617,121	340	786	720	(Z)	(Z)						
	Semifinished products:								13,634	11,088	723,634	891,685	2	1
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	214,286	266,254	910	2,246	2,058	(Z)	1						
33122 59	Wire rods	38,134	84,104	728	2,373	2,175	2	3	18,835	33,592	56,241	115,518	33	29
	Finished products:													
33124 53	Plates and structurals	128,834	285,926	3,371	7,649	7,010	3	2	7,464	14,684	132,927	293,600	6	5
	Sheet and strip:													
33123 51	Hot-rolled	400,151	349,004	6,288	11,529	10,565	2	3	143,911	237,848	1,525,570	2,353,029	9	10
33167 51	Cold-rolled	1,001,589	1,806,925	13,793	32,936	30,183	1	2						
	Bars:													
33124 61	Hot-rolled	51,323	157,337	3,420	8,725	7,996	6	5	6,171	13,596	56,074	162,937	11	8
33168 51	Cold-finished	97,194	367,332	1,759	6,729	6,166	2	2	19,717	42,531	115,152	403,697	17	11
	Pipes and tubes:													
	Pressure tubing:													
33176 61	Seamless	11,193	76,579											
33176 62	Welded	58,224	215,129											
	Mechanical tubing:			7,648	23,900	20,902	8	5	28,500	87,379	121,147	518,274	24	17
33176 63	Seamless	2,260	26,875											
33176 64	Welded	28,618	133,214											
33155 51	Wire	84,377	282,986	1,917	6,322	5,793	2	2	22,703	70,845	105,163	348,038	22	20

(NA) Not available. (X) Not applicable. (Z) Less than one-half of 1 percent.

[1] See table 10 for a comparison of shipment, export, and import codes.

[2] Excludes shipments of steel processed on a conversion basis for nonsteel producing companies. See text for data on such operations. Also excludes quantities of steel consumed in steel producing plants in the manufacture of fabricated products and as maintenance, repair, and operating supplies (MRO).

[3] Source: Bureau of the Census report FT 410, U.S. Exports--Schedule E--Commodity by Country.

[4] These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors are based on data for 1981 which are published in Origin of Exports of Manufactured Products, M81(AS)-5, appendix B. The current adjustment factor for industry group 331 is 0.9164.

[5] Source: Bureau of the Census report IM 145-K, U.S. Imports for Consumption and General Imports.

[6] This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus U.S. import duties.

[7] Apparent consumption is derived by subtracting exports from the total of manufacturers' shipments plus imports.

[8] In a related Current Industrial Report series M33-3, Inventories of Steel Mill Products, apparent consumption for the current year is calculated based on net shipments (total of all grades and shapes) as published by the American Iron and Steel Institute. By using net shipments, the tonnage passing between mills is not duplicated in the totals. However, this approach has some limitations when applied to individual products. In the derivation of net shipments (explained in the text), receipts of each product are subtracted to eliminate such duplication. Thus, to the extent that the figures reported for receipts by steel mills include imported steel, the derived figures for net shipments are understated. When the net shipments figure is the basis for the calculation of apparent consumption, the resulting apparent consumption total is understated and the percent of imports to apparent consumption is overstated by an indeterminate amount.

[9] Includes quantities of steel consumed in steel producing plants in the manufacture of fabricated products and maintenance, repair, and operating supplies (MRO), while excluding receipts. Refer to table 3A for the net shipments detail.

Table 9B. SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF STEEL MILL PRODUCTS: 1983

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Manufacturers' shipments[1 2]		Exports of domestic merchandise[1 3]		Estimated producers' value[4]	Percent exports to manufacturers' shipments[2]		Imports for consumption[1 5]		Apparent consumption[2 7 8]		Percent imports to apparent consumption	
		Quantity	Value f.o.b. plant	Quantity	Value at port		Quantity	Value	Quantity	Value c.i.f.[6]	Quantity	Value	Quantity	Value
	Net shipments	[9]70,162,251	(X)	1,473,244	1,064,914	975,885	2	(X)	17,117,567	7,680,395	86,074,566	(X)	20	(X)
	Carbon steel	[9]62,790,635	(X)	849,237	647,626	593,484	2	(X)	16,398,621	6,757,413	78,340,019	(X)	21	(X)
	Alloy steel	[9]6,094,128	(X)	307,098	301,986	276,738	5	(X)	528,835	529,448	6,315,365	(X)	8	(X)
	Stainless steel	[9]1,277,488	(X)	48,917	115,302	105,663	4	(X)	19,0611	393,534	1,419,182	(X)	13	(X)
	CARBON STEEL													
33122 11	Ingots	426,357	93,451	1,480	1,282	1,175	(Z)	1						
	Semifinished products:													
33122 13	Blooms, billets, slabs, sheet bars, tin mill bars, tube rounds, and skelp	3,704,378	1,075,333	22,972	5,185	4,752	1	(Z)	786,535	176,692	4,892,818	1,339,549	16	13
33122 19	Wire rods	3,017,036	931,934	1,303	782	717	(Z)	(Z)	1,091,189	340,611	4,106,922	1,271,828	27	27
	Finished products:													
33124 12	Plates	2,646,317	1,038,364	63,408	19,300	17,687	2	2	1,367,152	395,525	3,950,061	1,416,202	35	28
	Sheets:													
33123 11	Hot-rolled (including enameling sheets)	17,941,626	5,840,505	28,480	13,358	12,241	(Z)	(Z)	2,304,836	701,738	20,217,982	6,530,002	11	11
33167 11	Cold-rolled	13,365,642	5,853,043	22,732	10,747	9,849	(Z)	(Z)	2,331,247	902,206	15,674,157	6,745,400	15	13
	Sheets and strip:													
	Galvanized:													
33123 13	Hot-dipped	5,055,426	2,658,519	34,547	21,539	19,738	1	1						
33123 15	Electrolytic	643,609	397,863											
33123 16	All other metallic coated (including long ternes and electric)	1,187,035	678,264	43,595	34,124	31,271	4	5	2,109,155	1,053,751	8,917,083	4,737,388	24	22
	Strip:													
33123 19	Hot-rolled	579,571	260,120	8,772	6,539	5,992	2	2	32,531	13,432	603,330	267,560	5	5
33167 15	Cold-rolled	1,061,635	821,830	12,494	17,021	15,598	1	2	66,090	55,627	1,115,231	861,859	6	6
	Tin mill products:													
33123 24	Black plate	406,601	213,234	60,929	13,704	12,558	15	6	170,420	77,721	516,092	277,251	33	28
33123 26	Electrolytic and hot-dipped tin plate	2,956,395	1,899,402	170,057	72,783	66,698	6	4	290,535	184,793	3,076,873	2,011,412	9	9
33123 27	All other tin mill products (including short ternes and steel foil) tin free steel	972,893	580,334	18,571	11,043	10,120	2	2	3,284	1,748	957,606	571,039	(Z)	(Z)
33124 15	Structural shapes (heavy), sheet piling, and bearing piles	2,720,923	970,837	38,970	22,657	20,763	1	2	1,544,189	493,657	4,226,142	1,443,731	37	34
	Bars:													
33124 22	Hot-rolled bars, except concrete reinforcing	5,313,277	2,061,516	36,590	17,758	16,273	1	1	323,400	127,022	5,600,087	2,172,265	6	6
33124 24	Light structurals (under 3")	899,854	252,446	12,377	26,558	24,338	1	11	88,288	31,942	975,765	257,830	9	12
33124 26	Concrete reinforcing bars	3,999,278	1,070,859	34,528	9,340	8,559	(Z)	1	205,620	46,199	4,170,370	1,108,499	5	4
33168 11	Cold-finished bars	1,090,745	801,944	11,530	7,305	6,694	1	1	131,746	72,769	1,210,961	868,019	11	8
33124 29	Tool steel	836	4,053	(NA)	(NA)	(NA)	(NA)	(NA)	6,249	25,617	7,085	29,670	88	86
	Rails, wheels, and track accessories:													
	Rails:													
3312C 11	Standard tee (over 60 lb. per yard)	589,430	230,301	4,331	3,192	2,925	1	1	91,145	32,495	676,244	259,604	13	13
3312C 13	All other rails, including light (60 lbs. per yard and under)	26,758	12,931	4,884	3,769	3,454	18	29	17,815	7,446	39,689	16,608	45	45
3312C 15	Joint bars	16,190	19,095	9,300	8,922	8,176	7	12	44,259	15,982	165,222	74,937	27	21
3312C 17	Tie plates	114,073	48,036											
3312C 19	Wheels (rolled and forged)	52,239	40,684	1,303	4,929	4,517	2	12	4,881	4,921	55,817	40,676	9	12
3312C 21	Axles (rolled and forged)	6,100	5,469	255	4,111	3,767	4	69	1,619	2,618	7,464	4,320	22	61
3312C 23	Track spikes	55,673	27,671	(NA)	(NA)	(NA)	(NA)	(NA)	1,123	662	56,796	28,333	2	2

See footnotes at end of table.

Table 9B. SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF STEEL MILL PRODUCTS: 1983--Continued

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Manufacturers' shipments[1 2]		Exports of domestic merchandise[1 3]		Estimated producers' value[4]	Percent exports to manufacturers' shipments[2]		Imports for consumption[1 5]		Apparent consumption[2 7 8]		Percent imports to apparent consumption	
		Quantity	Value f.o.b. plant	Quantity	Value at port		Quantity	Value	Quantity	Value c.i.f.[6]	Quantity	Value	Quantity	Value
	CARBON STEEL--Continued													
	Finished products--Continued													
	Pipe and tubes:													
33176 12	Line pipe	722,415	393,540	18,677	18,775	17,205	3	5						
33176 19	Oil country goods	766,151	490,499	36,146	63,571	58,256	5	12						
	Seamless tubing:													
33176 21	Pressure	58,017	74,153	4,590	10,707	9,812	3	6	2,328,561	1,274,807	7,064,265	4,292,922	33	30
33176 23	Mechanical	77,149	100,929											
	Welded tubing:													
33176 22	Pressure	94,417	112,083	23,464	25,171	23,067	1	2						
33176 24	Mechanical	1,619,307	1,208,620											
33176 29	Standard and miscellaneous pipe	1,044,283	614,614	90,673	116,993	107,212	9	17						
33176 27	Structurals	533,160	245,956	5,645	7,341	6,727	1	3						
	Wire:													
33155 11	Plain wire	1,507,382	859,934	3,145	7,306	6,695	(Z)	1	253,374	160,562	1,757,611	1,013,801	14	16
33155 15	Galvanized wire	258,481	168,205	4,641	9,694	8,884	2	5	170,000	121,925	572,012	436,858	30	28
33155 19	Other coated wire	148,172	155,612											
	Wire products:													
33152 21	Nails and staples	343,250	294,184	6,916	24,326	22,292	2	8	374,038	210,637	710,372	482,529	53	44
33159 51	Barbed and twisted wire	79,516	57,626	1,599	5,292	4,850	2	8	28,927	14,622	106,844	67,398	27	22
33156 21	Wire fence, woven and welded	239,055	159,908	(NA)	(NA)	(NA)	(NA)	(NA)	6,643	3,857	245,698	163,765	3	2
33159 55	Bale ties	39,027	25,465	(NA)	(NA)	(NA)	(NA)	(NA)	668	650	39,695	26,115	2	2
33151 11	Wire rope and cable	159,636	282,308	6,281	12,952	11,869	4	4	61,102	64,245	214,457	334,684	28	19
	Wire strand:													
33151 33	For prestressed concrete	137,972	79,535	268	689	631	(Z)	1	80,033	45,279	217,737	124,183	37	36
33151 35	Other	113,979	88,854	3,784	8,861	8,120	3	10	81,967	95,655	192,162	175,648	42	54
33157 71	Woven wire netting	72,648	61,681	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	72,648	61,681	(NA)	(NA)
	ALLOY STEEL													
33122 31	Ingots	166,180	116,778	1,950	1,810	1,659	1	2						
	Semifinished products:								34,498	18,841	705,168	493,265	5	4
33122 36	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	581,429	376,398	74,989	16,922	15,507	13	4						
33122 39	Wire rods	26,100	19,646	4,136	3,906	3,579	16	20	52,802	32,143	74,766	47,881	71	67
	Finished products:													
33124 31	Plates and structural shapes	1,351,994	771,264	40,629	42,073	38,556	3	5	35,103	30,813	1,346,468	763,521	3	4
33124 35	Sheets and strip:													
	Sheets:													
33123 31	Hot-rolled	1,146,325	514,756	10,521	11,537	10,573	1	2	6,600	3,927	1,142,404	508,110	1	1
22167 31	Cold-rolled	351,272	256,169	5,126	5,547	5,083	1	2	7,992	12,954	354,138	264,040	2	5
33123 34	Galvanized, electrical, and metallic coated	361,975	327,329	10,673	11,113	10,184	3	3	38,580	38,491	389,882	355,636	10	11
	Strip:													
33123 39	Hot-rolled	77,135	47,053	5,074	5,690	5,214	7	12	7,119	17,678	233,755	293,196	3	6
33167 35	Cold-rolled	162,441	243,073	7,865	8,918	8,172	5	4						
	Bars:													
33124 41	Hot rolled (including structural shapes under 3")	1,336,762	849,245	58,067	39,769	36,444	4	5	135,983	74,466	1,414,678	883,940	10	8
33168 31	Cold-finished	153,775	195,977	7,311	9,353	8,571	5	4	27,954	22,000	174,418	209,406	16	11
	Tool steel:													
33124 48	High speed	11,294	74,909	3,565	7,451	6,828	7	4	53,520	99,501	97,951	274,222	55	36
33124 49	Other than high speed	36,702	106,640											

See footnotes at end of table.

Table 9B. SHIPMENTS, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF STEEL MILL PRODUCTS: 1983--Continued

(Quantity in short tons; value in thousands of dollars)

Product code[1]	Product description	Manufacturers' shipments[1,2]		Exports of domestic merchandise[1,3]		Estimated producers' value[4]	Percent exports to manufacturers' shipments[2]		Imports for consumption[1,5]		Apparent consumption[2,7,8]		Percent imports to apparent consumption	
		Quantity	Value f.o.b. plant	Quantity	Value at port		Quantity	Value	Quantity	Value c.i.f.[6]	Quantity	Value	Quantity	Value
	ALLOY STEEL--Continued													
	Finished products--Continued													
	Pipe and tubes:													
33176 43	Pressure tubing	23,331	61,861											
33176 32	Oil country goods and line pipe	179,550	150,515	71,824	128,320	117,592	12	15	103,200	148,685	622,815	794,394	17	19
33176 48	Structural and miscellaneous and standard	14,518	6,737											
33176 45	Mechanical tubing	374,040	544,188											
33155 37	Wire (plain and coated)	32,351	60,375	5,368	9,577	8,776	17	16	24,984	29,949	51,967	80,747	48	37
	STAINLESS STEEL													
33122 51	Ingots	221,623	273,132	379	893	818	(Z)	(Z)	1,450	2,127	432,963	513,078	(Z)	(Z)
	Semifinished products:													
33122 56	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	211,254	240,052	985	1,544	1,415	(Z)	1						
33122 59	Wire rods	26,015	54,922	698	2,196	2,012	3	4	26,504	45,739	51,821	98,465	51	46
	Finished products:													
33124 53	Plates and structurals	113,691	256,525	8,093	9,474	8,682	7	4	5,209	10,716	110,807	257,767	5	4
	Sheet and strip:													
33123 51	Hot-rolled	402,508	352,217	6,127	12,115	11,102	2	3	90,581	158,716	1,285,529	1,957,564	7	8
33167 51	Cold-rolled	816,258	1,490,752	17,691	36,031	33,019	2	2						
	Bars:													
33124 61	Hot-rolled	40,344	128,971	4,450	9,831	9,009	11	8	7,558	14,132	43,452	134,094	17	11
33168 51	Cold-finished	68,243	255,170	1,646	5,996	5,495	2	2	31,651	59,634	98,248	308,808	32	19
	Pipes and tubes:													
	Pressure tubing:													
33176 61	Seamless	12,081	88,168											
33176 62	Welded	49,109	180,334	6,401	31,406	28,780	7	7	16,961	61,546	99,184	434,311	17	14
	Mechanical tubing:													
33176 63	Seamless	2,579	22,935											
33176 64	Welded	24,855	110,108											
33155 51	Wire	68,637	224,918	2,447	5,816	5,330	4	2	10,697	40,924	76,887	260,512	14	16

(NA) Not available. (X) Not applicable. (Z) Less than one-half of 1 percent.

[1] See table 10 for a comparison of shipment, export, and import codes.

[2] Excludes shipments of steel processed on a conversion basis for nonsteel producing companies. See text for data on such operations. Also excludes quantities of steel consumed in steel producing plants in the manufacture of fabricated products and as maintenance, repair, and operating supplies (MRO).

[3] Source: Bureau of the Census report FT 410, U.S. Exports--Schedule E--Commodity by Country.

[4] These values were derived by use of adjustment factors to exclude freight, insurance, and other charges incurred in moving goods to the port of export. This adjustment is made to convert the values to an approximation of the producers' value of exported goods. Current adjustment factors are based on data for 1981 which are published in Origin of Exports of Manufactured Products, M81(AS)-5, appendix B. The current adjustment factor for industry group 331 is 0.9164.

[5] Source: Bureau of the Census report IM 145-X, U.S. Imports for Consumption and General Imports.

[6] This dollar value represents the c.i.f. (cost, insurance, and freight) value at the first port of entry in the United States plus U.S. import duties.

[7] Apparent consumption is derived by subtracting exports from the total of manufacturers' shipments plus imports.

[8] In a related Current Industrial Report series M33-3, Inventories of Steel Mill Products, apparent consumption for the current year is calculated based on net shipments (total of all grades and shapes) as published by the American Iron and Steel Institute. By using net shipments, the tonnage passing between mills is not duplicated in the totals. However, this approach has some limitations when applied to individual products. In the derivation of net shipments (explained in the text), receipts of each product are subtracted to eliminate such duplication. Thus, to the extent that the figures reported for receipts by steel mills include imported steel, the derived figures for net shipments are understated. When the net shipments figure is the basis for the calculation of apparent consumption, the resulting apparent consumption total is understated and the percent of imports to apparent consumption is overstated by an indeterminate amount.

[9] Includes quantities of steel consumed in steel producing plants in the manufacture of fabricated products and maintenance, repair, and operating supplies (MRO), while excluding receipts. Refer to table 3A for the net shipments detail.

DESCRIPTION OF SURVEY

Scope of Survey. This survey covers all known producers of steel mill products.

Survey Methodology. The statistics in this publication were collected by mail on Bureau of the Census annual Form MA33B, Steel Mill Products. The survey panel includes all known producers of steel mill products, approximately 330 companies.

Reliability of Data. Survey error may result from several sources: (1) inability to obtain information about all cases in the survey; (2) response errors; (3) definitional difficulties; (4) differences in the interpretation of questions; (5) mistakes in recording or coding the data obtained; and (6) other errors of collection, response, coverage, and estimation for missing data. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is due to imputing data for nonrespondents, for late reporters, and for data which fail logic edits. Missing figures are imputed based on yearly movements shown by reporting firms. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is not precisely known, but is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

Revisions to Previous Period Data. Statistics for previous years may be revised as the result of corrected data from respondents, late reports for which imputations were made as described above, or other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Adjustment for Price Change. All dollar figures included in this publication are in current dollars; i.e., they have not been adjusted for price change.

EXPLANATION OF TERMS

Quantity and Value of Shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable sales to unaffiliated customers; i.e., the value includes an appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded. The definition of the products collected in this report are in accordance with the definitions used in the reports of the American Iron and Steel Institute (AISI).

Net Shipments. This figure is derived by subtracting the steel mills' domestic receipts for each steel mill shape from the total of shipments to other companies, transfers to other plants, and tonnage consumed in steel mills in the production of fabricated products and as maintenance, repair, and operating supplies. Prior to 1980, import receipts were also used in the net shipments calculation. Beginning in 1980, import receipts of steel mill products for further processing were collected separately and no longer used in the net shipments calculation.

Carbon Steel. Steel is considered to be carbon steel when no minimum content is specified or required for aluminum (except for deoxidation and/or grain size control), chromium, cobalt, niobium, molybdenum, nickel, titanium, tungsten, vanadium, zirconium, or any other element added to obtain a desired alloying effect, when the specified minimum for copper does not exceed 0.40 percent, or when the maximum content specified for any of the following elements does not exceed the percentages noted: maganese, 1.65; silicon, 0.60; copper, 0.60; boron may be added to carbon steels to improve hardenability.

In all carbon steels, small quantities of certain residual elements, such as copper, nickel, molybdenum, chromium, etc., are unavoidably retained from raw materials. Those elements are considered as incidental.

Alloy Steel. Steel, including high-strength alloy steel, which contains alloying elements in excess of maximum standard ranges of American Iron and Steel Institute as follows:

Manganese	in excess of 1.65 percent
Silicon	in excess of 0.60 percent
Copper	in excess of 0.60 percent
Chromium	up to 3.99 percent
Aluminum, cobalt molybdenum, nickel titanium, tungsten, vanadium, zirconium, or any other alloying element	Any amount specified or known to have been added to obtain a desirable alloying effect

Stainless Steel. Any of several steels containing 10 percent or more chromium as the principal alloying elements. Stainless steel usually exhibits passivity in aqueous environments.

Heat Resisting Steel. Includes all grades of steel containing at least 4.0 percent but less than 10 percent chromium when intended for heat resisting applications. Heat resisting steel is reported under stainless steel.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; on the other hand, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to the problems mentioned above, there are also the following problems affecting the comparability of the three sets of data.

Valuation. There are different methods of valuation for the three types of data:

- *Domestic Output*— Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

- *Exports*— Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance and other charges to the export point.

  Estimated producers' values of exports have also been developed. These values more closely approximate the values reported for domestic output because they exclude freight, insurance, and other charges applied from the producing plant to the export point.

- *Imports*— Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

Duplication in Quantity and Value of Output. Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

Low-Value Export and Import Transactions. Detailed commodity information is not included for individual import shipments valued at not more than $250 or for individual export shipments valued at not more than $500. This is believed to have only negligible effects on the statistics for the bulk of the commodities.

Manufacturers' Shipments, Not Specified by Kind. The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

Time Lag Between Output and Exports. There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

"Direct" vs "Total" Commodity Exports and Imports. Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

Used Commodities. With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

Geographic Area of Coverage. Import and export data reflect the movement of merchandise into and out of U.S. foreign trade zones, the U.S. Virgin Islands, and the U.S. customs territory (includes the 50 States, the District of Columbia, and Puerto Rico).

HISTORICAL NOTE

Data on steel mill products have been collected by the Bureau of the Census since 1921. Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library. A list of these libraries may be obtained from the Bureau of the Census regional offices:

Atlanta, Georgia	(404) 881-2271
Boston, Massachusetts	(617) 223-2327
Charlotte, North Carolina	(704) 371-6142
Chicago, Illinois	(312) 353-6251
Dallas, Texas	(214) 767-0621
Denver, Colorado	(303) 234-3924
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New York, New York	(212) 264-3860
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Seattle, Washington	(206) 442-7828

RELATED REPORTS

The Bureau of the Census publishes the following related reports:

Series	Frequency	Title
Current Industrial Reports		
M33-3	Monthly	*Inventories of Steel Mill Shapes*
M33A	Monthly	*Iron and Steel Castings*
MQ32C	*Quarterly*	*Refractories*
MQ34K	Quarterly	*Steel Shipping Drums and Pails*
Other Industry Reports		
M3-1	Monthly	*Manufacturers' Shipments, Inventories, and Orders*
(AS)	Annually	Annual Survey of Manufactures (ASM)
(MC)	Quinquennially	Census of Manufactures
Foreign Trade Reports		
FT410	Monthly	*U.S. Exports—Schedule E—Commodity by Country*
FT135	Monthly	*U.S. General Imports—Schedule A—Commodity by Country*

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report MA33B	Nathaniel A. Shelton	(301) 763-5547
Foreign Trade publications	Joyce Ware	(301) 763-5140
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To order a Census Bureau publication	Customer Services (DUSD)	(301) 763-4100
International Trade Administration	Patrick Torrillo	(202) 377-0608

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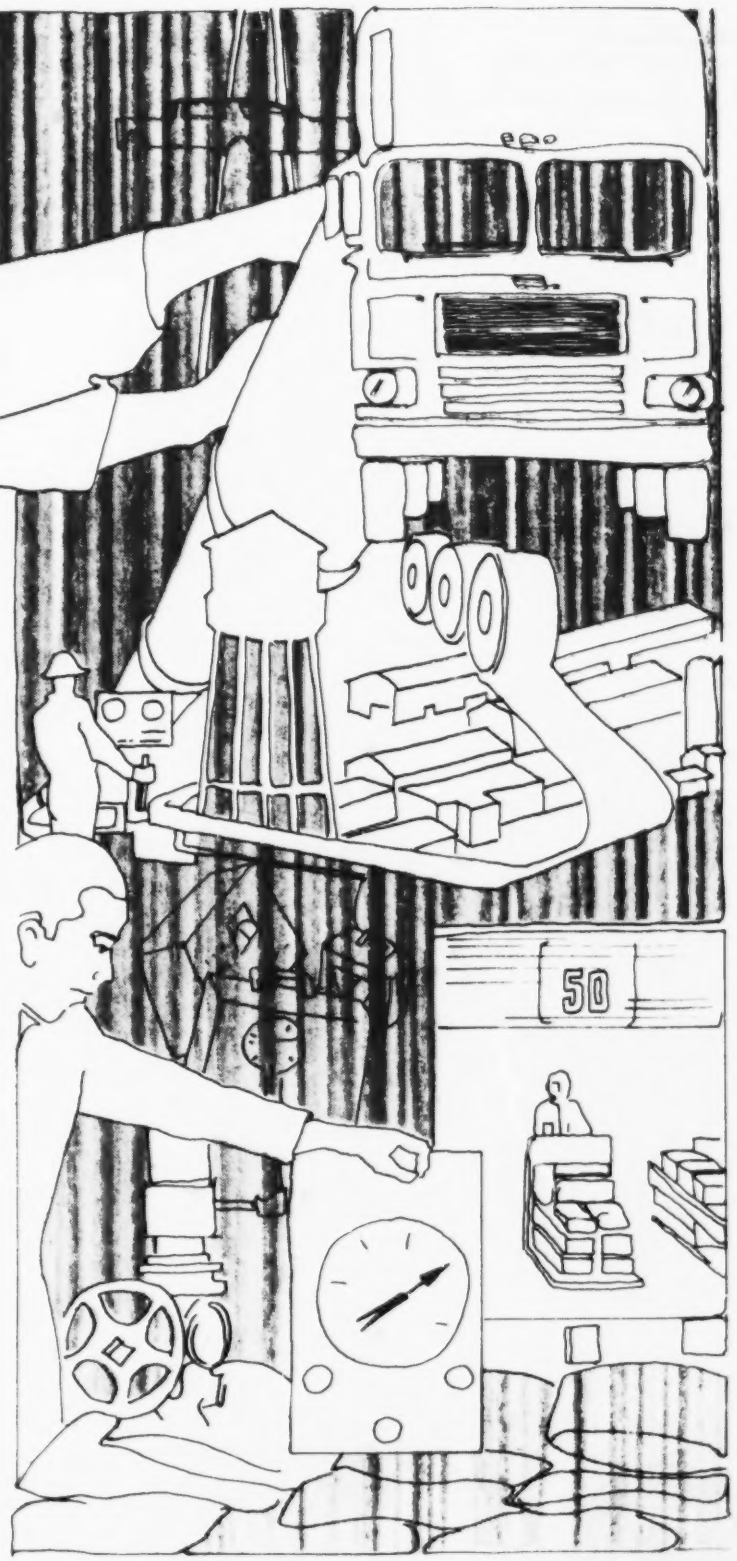
Current Industrial Reports



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